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REPORT
OF THE
ONTARIO HEALTH
SURVEY COMMITTEE



VOLUMES I II III

VOL. I —Pages 1 to 198

VOL. II —Pages 199 to 346

VOL. III—Pages 346 to 450

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PREFACE

The size and complexity of public health services in the Province of Ontario is indicated by the scope of this Report. To guard and improve the health of Ontario's 4½ million men, women and children is a job involving millions of dollars; it requires workable blending of voluntary effort and Government services.

Health is everybody's business. Responsibility for the health of our people cannot, and indeed should not, fall upon the 5,700 members of the Ontario Department of Health alone. Nevertheless the public at large have the right to expect intelligent leadership from the Department's experienced and competent specialists.

The leadership which Ontario enjoys in the matter of her health services is evidenced by the facts.

For example, steps taken in the detection and control of tuberculosis in Ontario have brought the death rate down from 160 per hundred thousand in 1900 to 13 in 1951, lowest among all Canadian provinces. Almost all of the costs for treatment in sanatoria have been paid by Ontario since 1938.

In 1951 the Ontario Government paid 89.7 of all sanatoria costs.

Pasteurization of milk for Ontario cities, towns and other designated municipalities was made compulsory in 1938. This law has been duplicated by only one other province in Canada. Virtually all milk sold in Ontario is safe for consumption, and this law has drastically reduced tuberculosis, typhoid and undulant fevers, and other diseases carried in milk.

Immunization against smallpox, diphtheria, lockjaw and whooping cough was fostered by free distribution of the necessary biological products.

Free medical services for Ontario residents on mother's allowances, old age pensions, blind pensions and direct relief were provided by Ontario Government in 1935.

The Report of the Ontario Health Survey Committee, to me, is a carefully prepared guide for the future activities of the Department of Health. The Report, conceived and executed in what is so clearly a spirit of public service, is just as valuable for its constructive criticisms as for its recommendations. The value of the report is illustrated by the fact that over half of the 94 recommendations are now being used and the remainder are under careful study. The Report most certainly provides a basis for the formulation of Department of Health policy for many years to come.

Of its many recommendations, one of those which, in my opinion is of prime importance, is the division of the Province of Ontario into seven districts, with complete medical services set up in each district.

I am in full agreement with this principle, but feel strongly that we need as many as fifteen such districts.

Capital grants to hospitals were first begun in Canada by the Ontario Government in 1947 to encourage hospital expansion. These building grants have aided in the development of a \$160 million hospital construction programme, (including hospitals now under construction or in advanced planning stages) since 1947.

Annual grants also made by the Government to hospitals for current maintenance will total \$8.5 million in 1952-1953. This can be compared with \$971,947 in 1930.

A serious shortage of mental hospital beds was noted by the report. This was due to lack of planning and building which extended over many years. The deficiency is being made up as quickly as possible, with an increase of 1,720 beds since 1948—a further 1,960 beds before the end of 1953, and 1,500 in 1954, and a planned program for ensuing years.

Psychiatric units in public general hospitals for treatment of early mental disorders are being encouraged. In November, 1951, the Province announced grants of \$8,500 per bed, supplemented by the existing Federal grant of \$1,500.

These psychiatric units, by giving early treatment in the general hospitals, will enable many patients to return home instead of going to mental hospitals for treatment. All such units will be under the direction of certified specialists.

Operation of such units has been hailed as the most forward step yet made in the mental health field.

Similar grants have been authorized for hospitals where it is considered necessary to provide 2 or 3 rooms for detention of mental patients prior to their admission to a mental hospital. These detention units are intended for more or less isolated communities where satisfactory accommodation is not available for such cases.

Thirty psychologists and more social workers have been engaged this year for the Ontario Mental Hospitals. Twenty-one physicians have been added to the staffs of Ontario Mental Hospitals for psychiatric training. This is in line with recommendations in the Report. On the preventive side, 15 of 31 mental health clinics recommended are now in operation.

Since the Report was made two important steps have been taken to encourage the training of more nurses. Capital grants to assist in building nurses' residences are available; a new school of nursing at University of Toronto is under construction.

The Health Survey Committee is conducting a morbidity study based on hospitalization in Ontario during census year 1951. This involves a study of more than 650,000 cases in the 175 public general hospitals in Ontario. This survey is believed to be the largest of its kind undertaken on this continent, if not in the world.

These few highlights, indicate, I think, that the Ontario Department

of Health is expanding its many health services as much as materials, personnel and money permit. We are deeply indebted to the chairman and members of the Ontario Health Survey Committee and to all who assisted them.

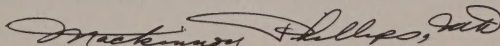
In the words of the report itself: "the public, which in the last analysis pays the bill and which stands to gain or lose by the efficiency of public health services, has the right of assurance that its best interests are being served in the vast and complex field of public health." We in the government recognize this public right and our own duty to serve the public interest to the best of our ability.

This Report was originally published in three volumes. In view of its importance in the public interest it has been reprinted, three volumes in one book. A fourth volume is still in the course of compilation and will include a complete study of morbidity—the prevalence of disease in Ontario. (We hope to be able to supply this book to all medical services in Ontario as well as our sister provinces and our neighbours to the south.)

This Health Survey Report is based on a detailed study of Ontario's health facilities in existence during the basic year of 1948, but takes in a great many advances since that time.

I wish to pay tribute to the excellent work done by the Health Survey Committee under the chairmanship of Mr. George D. Davis; to the devoted effort of their sub-committees, and to the many qualified social workers and public health specialists who have so freely contributed their advice and technical knowledge.

The fine work of this group of people has resulted in a health survey of great value to the people of the Province, not only at present, but in future years. On behalf of all our citizens their work is here gratefully acknowledged.



Mackinnon Phillips, M.D., C.M.,

October 1, 1952.

Minister of Health,
Province of Ontario.

REPORT OF THE ONTARIO HEALTH SURVEY COMMITTEE

VOLUME I

Hospital Facilities and Services

Mental Facilities and Services

Private Nursing Homes

Dental Facilities and Services

**THE FIRST VOLUME OF A THREE-VOLUME REPORT
TO THE MINISTER OF HEALTH FOR ONTARIO**

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REPORT OF THE ONTARIO HEALTH SURVEY COMMITTEE

1950

VOLUME I

CONTENTS OF VOLUME I

Letter of Presentation	Page 5
Acknowledgments	Page 7
Index to Tables	Page 11
Index to Charts and Maps	Page 14
Section A: Hospital Facilities and Services	Page 15
Solicitation of Funds from the Public.....	Page 103
Section B: Mental Facilities and Services.....	Page 107
Section C: Private Nursing Homes	Page 159
Section D: Dental Facilities and Services.....	Page 169

VOLUME II CONTAINS

Medical Manpower in Ontario
Provision of Nursing Care
Control of Cancer
Prevention, Treatment and Control
of Tuberculosis

VOLUME III CONTAINS

Public Health Services
Handicapping Conditions in Children
Rehabilitation of Adults
Prepayment Plans for Hospital and
Medical Care

The Honourable Mackinnon Phillips, M.D., C.M.,
Minister of Health for Ontario.

Dear Sir:

I have the honour to present the report of the Ontario Health Survey Committee. This committee was appointed by an Order-in-Council, approved by His Honour the Lieutenant-Governor the ninth day of September, 1948.

The Order-in-Council contains a provision that:—

“The Committee enquire into and report to the Minister of Health upon—

- (i) existing health, hospital and related facilities and services;
- (ii) such other matters as are pertinent to the subject; and
- (iii) a plan for the improvement, extension and establishment of such health, hospital and related services as will ensure the most effective development of health services.”

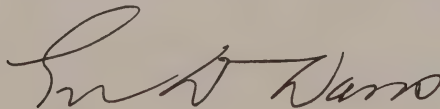
In order to conduct a survey of the scope defined by these terms of reference, and after completion in November, 1948, of a pilot study in one region of the province, the Survey Committee recommended establishment of ten special committees, which were authorized by a second Order-in-Council dated the twenty-first day of April, 1949. Each special committee was formed with a view to assisting in specific parts of the health survey, and its membership therefore included men and women with specialized knowledge and experience, and with particular interest in the subjects under consideration. The special committee members, who contributed generously of their time and energy that this survey might be as well informed as possible, are listed on pages 7 to 10, together with the organizations by whom they were nominated.

Every effort was made to include all informed points of view, however divergent, in the deliberations of these special committees; and representations were received from various groups and individuals who wished to put forward some special subject for consideration.

The report has been prepared in twelve sections, four of which appear in this first volume, and the remainder in two succeeding volumes.

It is a pleasure to acknowledge the assistance of all committee members, consultants, and members of the Survey staff, and the co-operation of the various departments of the Government of Ontario. The assistance of officials of the Department of Health is deserving of particular mention.

Respectfully submitted,



GEORGE D. DAVIS,
Chairman,
Ontario Health Survey Committee.

December 29, 1950.

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ACKNOWLEDGMENTS

The Ontario Health Survey Committee wishes to express its appreciation of the assistance it has received from the officers, nominees, and members of the numerous associations, departments of provincial, municipal, and federal governments, the universities of Ontario, and from the many men and women throughout the province who, at considerable sacrifice to themselves, have served either as members of special committees or as private individuals. This report has benefitted greatly from the wealth of experience and professional knowledge thus put at its disposal.

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INDEX TO TABLES IN VOLUME I

Table Number		Page	Table Number		Page
A1	Income Sources of Public General Hospitals in Ontario, 1928-1949.....	19	A20	Convalescent Hospitals and Beds in Ontario as of Dec.31, 1948.....	44
A2	Charges to Patients for Extra Services in Public General Hospitals.....	20	A21	Hospital Accommodation for Long-Term Illness as of Dec. 31, 1948....	45
A3	Charges for Extra Services in Public General Hospitals of Ontario, 1949...	21	A22	Ownership of Licensed Private General Hospitals in Ontario as of Dec. 31, 1948	46
A4	Average Per Diem Charges to Private & Semi-Private Patients in Toronto ..	21	A23	Summary of Acceptability of Acute General Hospital Facilities.....	48
A5	Average Per Diem Charges to Public Ward Patients in Toronto	21	A24	Estimates by Public General Hospitals in Ontario of the Adequacy and Inadequacy of their Service Facilities	49
A6	Public General Hospital Operating Costs in Ontario, 1900 - 1949.....	22	A25	Percentage of Public General Hospital Activity Occurring by Regions in 1948.....	50
A7	Distribution of Patients in Public General Hospitals in Ontario by Method of Payment, 1948.....	23	A26	Public General Hospital Population Data for 1948	51
A8	Methods of Payment in Tor. Hospitals 1948 by patients other than York Cty..	24	A27	Distribution of Days of Care by Operating Authority and by Size Groups for year 1948	53
A9	Showing How the Total 1949 Provincial Grant for Maintenance would be Distributed on Two Different Bases ...	33	A28	Public General Hospital Beds and Days of Care in Relation to Population.....	53
A10	Provincial Maintenance Grants to Public General Hospitals in Ontario, 1900 - 1949, Related to Operating Costs and Income	35	A29	Personnel in Public General Hospitals of Ontario	54
A11	Ontario's Hospital Inventory	37	A30	Personnel in Ontario's Two Convalescent Hospitals.....	55
A12	Beds for Hospital Care in Ontario....	39	A31	Personnel in Ontario's 10 Hospitals for the Chronically Ill and Incurable ..	55
A13	Public General Hospitals of Ontario By Size Grouping at Dec. 31, 1948...	40	A32	Personnel in Licensed Private Hospitals in Ontario	56
A14	Distribution of Public General Hospital Beds by Size and Operating Authority (Based on Rated Capacity)..	40	A33	Full and Part-Time Personnel in Various Hospital Services in Ontario .	56
A15	Distribution of Several Types of Hospital Beds by Regions in Ontario .	41	A34	A Half Century of Hospital Experience in Ontario	57
A16	Estimated Bed Complement of Public General Hospitals in Ontario	42	A35	Trends in Hospitalization -- Public General Hospitals of Ontario, 1901 - 1949	58
A17	Distribution of Bassinettes by Hospital Size and Operating Authority....	43	A36	Active Treatment Beds Needed and Planned by Regions.....	60
A18	Distribution of Ontario's Public General Hospital Beds by Region and Services (as of Dec.31, 1948)...	43	A37	Estimated Public General Hospital Bed Needs of Health Regions in Ontario by Days of Care Approach	61
A19	Isolation Hospitals and Isolation Beds in Ontario as of Dec. 31, 1948 .	44			

INDEX TO TABLES IN VOLUME I

Table Number	Page	Table Number	Page
A38 Construction Program for Public General Hospitals in Ontario.....	62	A55 Days of Hospitalization in Selected Age Groups for Selected Diagnostic Sections.....	92
A39 Estimated Need of Beds for the Long-Term Patient, 1950-1954.....	63	A56 % Distribution of Total Discharges & Deaths by Age for Selected Diagnostic Sections.....	93
A40 Construction Program to Provide Long-Term Beds (at Dec. 31, 1948)...	64	A57 % Distribution of Male Discharges & Deaths by Age for Selected Diagnostic Sections.....	94
A41 Inventory and Estimated Needs of Public Gen. Hospital Personnel.....	66	A58 Cases & Days of Care for Male Patients by Age for Selected Diagnostic Sections.....	95
A42 Present (Dec. 31, 1948) and Suggested Distribution of Pathologists by Health Regions of Ontario	67	A59 % Distributions of Female Discharges & Deaths by Age for Selected Diagnostic Sections.....	96
A43 Present (Dec. 31, 1948) and Suggested Distribution of Radiologists by Health Regions of Ontario	68	A60 Cases and Days of Care for Female Patients by Age for Selected Diagnostic Sections.....	97
A44 Residence of All York County Patients in Toronto Public General Hospitals 1948	71	A61 Length of Stay Related to Discharges and Deaths for Diagnostic Sections ..	98
A45 Residence of All Patients in Toronto Public General Hospitals in 1948.....	72	A62 Percentage of Discharged Patients in Selected Age Groups by Length of Stay	99
A46 Percentage of Patients from Outside York County in Each Toronto General Hospital in 1948	74	A63 Numbers of Discharged Patients in Various Method of Payment Groups...	100
A47 Summary of Toronto Metropolitan Area Hospitals, Bed Capacity and Percentage Occupancy at Dec. 31, 1948	75	A64 % of Days of Care in Selected Length of Stay Groups by Method of Payment .	101
A48 Information on Licensed Private Hospitals in Toronto Metropolitan Area, 1948	78	A65 Discharged Patients & Days of Care by Residence & Hospital.....	102
A49 Hospital Construction in Toronto Metropolitan Area 1948-1951	79	B1 Case Load of Travelling Clinics, 1948	114
A50 Plan of Development for Hospital Facilities in Ontario.....	80	B2 New Cases in Travelling Clinics by Referring Agency, 1948	114
A51 Out-Patient Departments Reported by Public General Hospitals to Ontario Department of Health, 1949..	85	B3 Niagara District Clinic: Statistics Re Case Load, 1948	115
A52 Out-Patient Services Reported by 20 Public General Hospitals for 1949....	86	B4 Toronto Psychiatric Hospital - Out-Patient Department - 1948.....	116
A53 Out-Patient Costs and Revenue Reported by Toronto Hospitals to Ontario Department of Health in 1948	87	B5 Hospital for Sick Children - Clinic for Psychological Medicine, Staff Personnel	117
A54 Total Discharges and Deaths by Age Group for Selected Diagnostic Sections	91	B6 Caseload, Hospital for Sick Children Clinic for Psychological Medicine....	117
		B7 Sources of Referrals to Hospital for	

INDEX TO TABLES IN VOLUME I

Table Number	Page	Table Number	Page
		B23	Toronto Psychiatric Hospital - Cases Admitted by Magistrates' Warrants 1928-1948..... 145
B8	Toronto Children's Psychiatric Clinical Resources - 1948..... 120	B24	Court Psychiatric Facilities in the United States 146
B9	First Admissions and Patients in Residence in Ontario Mental Hospitals by Age 126	B25	Penal Institutions..... 150
B10	Accommodation in Ontario Mental Hospitals..... 127	B26	Estimated Cost of Implementing Mental Facilities and Services Report..... 158
B11	Patient Population in Ontario Mental Hospitals..... 128	C1	Private Nursing and Maternity Homes, 1948 164
B12	Accommodation Required in Mental Hospitals with Respect to Patients in Residence (As of End of 1948)..... 129	C2	Nursing and Maternity Homes by Bed Capacity and Hospital Regions..... 165
B13	Patients in Residence in Ontario Mental Hospitals by Length of Stay in Hospitals, Age and Sex, as at October 31, 1949..... 130	C3	Maternity Homes by Hospital Regions . 166
B14	Length-of-Stay Percentages in Ontario Mental Hospitals by Age as at October 31, 1949..... 131	D1	Dentists Reg'd with the Royal College of Dental Surgeons in Ontario at December 31, 1948, and Dental Sur- geons Found by Survey to be in Active Practice in Ontario at Dec. 31, 1948 . 176
B15	Ratio of Physicians to Patient Popu- lation in Ontario Mental Hospitals as at December 31, 1948..... 132	D2	Distribution by Age of those Holding Dental Degrees in Ontario at Dec. 31, 1948 and Dentists in Active Practice by Age and County..... 178
B16	Nursing Personnel in Ontario Mental Hospitals, (Including attendants) 136	D3	Number of Dentists Employed Part- Time in Selected Fields..... 180
B17	Ratio of Nursing Personnel to Patient Population in Ontario Hospitals as of December 31, 1948..... 137	D4	Certified Specialists as of December 31st, 1948..... 181
B18	Special Personnel (Other than Physicians and Nursing Personnel) in Ontario Mental Hospitals as of December 31, 1948..... 138	D5	Summary of Dental Survey Among 19,361 Ontario School Children in 1948 186
B19	Maintenance Expenditures in Ontario Mental Hospitals for Fiscal Year Ended March 31, 1949..... 139	D6	Dental Conditions Found Among 19,361 Ontario School Children by Age and Rural or Urban Area 187
B20	Deaths in Ontario Mental Hospitals, 1948 by Duration of Hospital Life 141	D7	Actual Count of Dental Conditions Found in Sample School Populations .. 188
B21	Deaths in Ontario Mental Hospitals by Age Groups for Year 1948 141	D8	School Dental Service - 1948 191
B22	Admissions by Order of Magistrate (Section 35) Ontario Mental Hospitals 1939 to 1947 145	D9	Faculty of Dentistry, University of Toronto - Origin and Location of Graduates by Classes..... 197

INDEX TO CHARTS AND MAPS IN VOLUME 1

Chart Number		Page		
A1	Trends in Hospitalization in Ontario, 1901-48	59	D2	Dental Graduates University of Toronto 1923-1948; Actual Number Remaining in Ontario Dec. 31, 1948... 182
A2	Percentage Occupancy in Toronto Public General Hospitals, 1948	76	Map Number	
B1	Number of Physicians in Ontario Hospital Service 1935-1949.....	134	A1	Division of Ontario into Seven Hospital Regions
B2	Age of O. H. S. Physicians (Dec. '48) ..	134		25
B3	Years of Service Prior to Resignation (1935-1949).....	134	A2	Hospitals in Metropolitan Toronto, Dec. 31, 1948
B4	Years of Service of O. H. S. Physicians (As of Dec. 1948)	134		73
B5	Resignations of Physicians from O. H. S. 1935-1949 by Salary Group...	135	A3	Hospital Regions of Southern Ontario .
B6	Salaries of Physicians in O. H. S.	135		82
D1	Dentists in Ontario by Five-Year Age Groups in 1948	182	A4	Hospital Regions of Northern Ontario .
				83
			D1	Number of Persons per Dentist in the Counties & Districts of Ontario, 1948. 174
			D2	Areas Covered by Dental Survey of School Children
				185

**REPORT OF THE ONTARIO
HEALTH SURVEY COMMITTEE**

SECTION A

HOSPITAL FACILITIES AND SERVICES

(Pages 15 to 102)

A. HOSPITAL FACILITIES AND SERVICES

CONTENTS

	Page
Summary.....	18
Recommendations	26
Chapter I: Hospital Administration in Ontario.....	28
Chapter II: Provincial Government Maintenance Grant to Public Hospitals	31
Chapter III: Ontario's Hospital Inventory	36
Chapter IV: Evaluation of Hospital Facilities	47
Chapter V: Ontario's Hospital Experience in 1948.....	50
Chapter VI: Inventory of Ontario's Hospital Personnel.....	54
Chapter VII: Estimating Ontario's Hospital Bed Needs.....	57
Chapter VIII: Ontario's Hospital Personnel Needs	66
Chapter IX: Toronto Metropolitan Hospital Service Area.....	71
Chapter X: Plan of Development for Ontario's Hospital Facilities.....	81
Chapter XI: Out-Patient Departments	85
Chapter XII: Morbidity Survey	88

HOSPITAL FACILITIES AND SERVICES

SUMMARY

At the time of this survey there were 146 public general hospitals in Ontario, 15 mental hospitals, 14 tuberculosis sanatoria, 10 hospitals for the chronically ill, two convalescent hospitals, 48 licensed private hospitals, and more than 500 unlicensed nursing homes providing in-bed care.

The public general, convalescent and private hospitals, those for the chronically ill and incurable, and infirmaries in schools, colleges and universities employed a full-time staff of 22,414 at December 31, 1948, including 64 physicians and 346 internes attached to staff. Adding the 3,677 persons employed in Ontario mental hospitals and 2,239 in the tuberculosis sanatoria brings this up to 28,330, without taking into account the numbers working in the more than 500 unlicensed nursing homes.

In 1948 the public general, mental, chronic and convalescent hospitals and sanatoria provided a total of 13,530,395 days of care. Complete figures on licensed private hospitals and unlicensed nursing homes are unobtainable, as no adequate records are kept, but a conservative estimate by the committee would add at least another 890,917 days of care, bringing the total over 14 million. And "days of hospital care", involving as it does a complex multitude of special procedures fitted to the particular needs of individual human beings, cannot treat patients as mere units on some sort of health production line.

Some measure of the tremendous expansion in hospital business volume may be realized when it is shown that whereas there were 29,572 patients treated in the 53 public general hospitals existing in this province in 1900, there were 568,823 patients treated in Ontario's 146 public general hospitals in 1948. In 1900 only 1.8 per cent of all births in Ontario occurred in hospital, but by 1948 this had climbed to 84.31 per cent--807 hospital-born babies in 1900 as against 87,827 in 1948. When the 4,857 private hospital births and 2,854 maternity home births are added to this, the total of births in some type of institution in Ontario in 1948 reaches 95,538. This is 91.71 per cent of all births registered in the province during the year. Of an estimated total of 106,575 births in the province in 1949, there were 91,699 or 86.41 per cent reported from public general hospitals. No 1949 reports were available at the time of publication on births in private hospitals and maternity homes.

Even the days of care figure is deceptive as a basis of comparing hospital activity today with that of half a century ago, because modern medical

and surgical techniques have so accelerated the rate of recovery that treatment for the same illness or injury today takes only a fraction of the number of days once required. A pneumonia case, for example in 1900 required from 28 to 33 days of hospitalization, while newly developed drugs have reduced hospitalization for respiratory diseases, including pneumonia, to an average of 4.2 days in 1950. This speeding up of the healing process means in reality that hospitals are not merely giving seven or eight times the number of days of care provided in 1900, but they are treating nearly 20 times the number of patients. The population of the province over the same 50-year period has just about doubled, so it is clear that a greater health and hospital consciousness prevails today.

Providing this speedier treatment today inevitably costs hospitals a great deal more than did treatment for the same condition at the turn of the century. In 1900 the average cost to the hospital for one patient for one day was 76 cents. By 1948 it had climbed to \$7.55. Average cost per patient for the average stay in hospital was \$20.10 in 1900, while it is now up to \$75.35 per patient for a stay about one third as long.

The size of hospital business in Ontario can be better appreciated when it is noted that total revenue of the 146 public general hospitals (including Red Cross Outposts) from all sources was \$42,271,839 in 1948 (1949 total revenue amounted to \$47,986,883.86). Of this 78.58 per cent (\$33,218,414) was paid by patients for their own care; 5.87 per cent (\$2,483,187) was paid by municipalities for the treatment of patients unable to pay their own way; and 9.2 per cent (\$3,887,876) represents grants received from the provincial government for current use. In addition to what they paid for the maintenance of indigent patients, some municipalities gave a further 3.69 per cent (\$1,558,926) to make up operating deficits incurred by 53 of our 146 public general hospitals in 1948. Seven municipally-owned hospitals received the bulk of this (\$1,294,265), with the largest single payment (\$637,027) going to one large city hospital.

The proportion of hospital income derived from private donations, bequests, etc., has been dwindling steadily through the years until in 1948 it represents only 2.3 per cent (\$971,062). This was once a substantial source of revenue, but although the dollar volume of such donations has nearly doubled in the last 20 years, the overall size of hospital operations has so increased (more than quadrupled) that donations are, percentagewise, less than half what they were even in the depression years of the 1930's.

TABLE A1

INCOME SOURCES OF PUBLIC GENERAL HOSPITALS IN ONTARIO, 1928-1949

(Not including Red Cross Outpost Hospitals, Lockwood Clinic and Mothercraft Centre, Toronto)

(a) Actual Income

INCOME SOURCE	1928	1933	1938	1943	1948	1949
Patients Municipalities for Indigents	\$6,422,856.95 1,420,960.20	\$5,560,820.21 2,928,840.15	\$7,486,071.26 2,820,321.56	\$14,526,657.63 1,961,868.57	\$32,829,171.78 2,475,991.67	\$37,533,362.04 2,564,956.26
Provincial Gov't Investments	757,747.90 187,749.02	1,038,760.16 226,233.13	1,176,371.72 350,344.65	900,226.87 495,667.51	3,820,737.57 152,371.79	4,598,716.01 224,162.90
Donations	493,199.43	491,285.97	715,354.27	661,759.78	932,260.64	744,950.50
	\$9,282,513.50	\$10,245,939.62	\$12,548,463.46	\$18,546,180.36	\$40,210,533.45	\$45,666,147.71
	*Grants from municipalities for deficits					
				Total	1,558,926.51	1,767,775.18
					\$41,769,459.96	\$47,433,922.89

(b) Percentage Distribution

INCOME SOURCE	1928	1933	1938	1943	1948	1949
Patients Municipalities for Indigents	69.19% 15.31	54.27% 28.59	59.66% 22.48	78.33% 10.58	78.60% 5.93	79.13% 5.41
Provincial Gov't Investments	8.17 2.02	10.14 2.21	9.37 2.79	4.85 3.57	9.15 2.36	9.69 1.47
Donations	5.31	4.79	5.70	3.57	2.23	1.57
	*Grants from municipalities for deficits					3.73

*Prior to 1948, grants from municipalities to make up deficits were not shown separately in the records.

Hospital business is unlike other businesses selling services to the public, in that the amount of service provided cannot be governed simply by the customer's ability to pay. Purchasing power is not the sole criterion, but rather individual human need. Hospitals, much as they need and benefit from many of the efficiency-boosting practices of modern business, must by their very nature operate under a different concept. The balance sheet of a hospital must include more than dollars and cents; it must add in the incalculable relief of human suffering.

Hospitals are unlike other businesses too, in that they are able to attract to their boards of governors many responsible citizens who are willing to serve without remuneration. There are more than 1,400 such hospital governors or trustees directing the public hospitals of this province today.

Of the 232,853 patients treated in the public wards of Ontario's public general hospitals in 1948 (excluding Red Cross Outpost hospitals), 49,077 were unable to pay for their own care. Of the 2,581,531 public ward days of care in this period, 42 per cent were given to indigent patients. Clearly then, the care of indigents constitutes a considerable part of the average hospital's activity. It would appear that hospitals lose money in caring for indigent patients, in spite of municipal and provincial government grants for this specific purpose. Care of indigents is a factor contributing to hospital losses, even in 1948, a year of high employment levels and prosperity.

In Toronto hospitals in 1948 there were 13,124 indigent patients, who received 290,631 days of care. Of these, 8,924 came from the city of Toronto and a further 1,574 from the county of York. The Toronto group received 196,291 days of care; those from York County 36,753. Payments

from the provincial government and the municipalities to the nine Toronto hospitals on behalf of these patients ranged from \$3.13 to \$5.76 per patient day. Average cost to the hospitals per patient day was \$7.29. (This does not represent the full extent of the provincial government maintenance grant, as will be shown later in the report).

As against this cost of \$7.29 per patient day, the average payment was \$4.39 in 1948. In contrast to this, the amount paid by non-indigents receiving similar treatment in the same public wards was \$9.15 per patient day, including the charges for extra services. The question of revising grants for indigent patients is dealt with in Chapter II.

Excluding Red Cross Outpost hospitals, the Lockwood Clinic and Canadian Mothercraft Centre, Toronto, which are included in some tables and records under public general hospitals, Table A1 offers a comparison of public general hospital income sources from 1928 to 1949.

It is clear from these percentages that the nature of hospital income, as well as its volume, has changed radically in the last 20 years. Today the patient pays a much higher proportion of the greatly increased total hospital revenue. Of the total income from patients in 1948 (\$32,829,171.78), private and semi-private patients paid 42.57 per cent; public ward patients 34.5 per cent; for indigents 10.55 per cent; outpatients 10.09 per cent; and the nursery 2.29 per cent.

There have been significant increases, too, in recent years in the charges to patients for extra services over and above the accommodation and nursing care provided at each hospital's established daily rate. Total charges for extras levied by Ontario's 123 public general hospitals, not including Red Cross hospitals, in the years 1946-49 are as follows:

TABLE A2
CHARGES TO PATIENTS FOR EXTRA SERVICES IN PUBLIC GENERAL HOSPITALS

Year	Total Revenue from Extras		
	Private and Semi-Private	Public Ward	Total
1946	\$3,665,384.57	\$2,100,144.75	\$5,765,529.32
1947	4,681,712.33	2,788,874.72	7,460,560.05
1948	5,821,189.77	3,629,312.49	9,450,502.26
1949	6,753,826.64	4,253,711.89	11,007,538.53

In 1949, private and semi-private patients in Ontario were charged nearly half again as much (48.12 per cent) as their room rate for extras. In 1948 they had to pay 44.43 per cent extra, in 1947 they were charged 41.4 per cent extra, and in 1946 the charge for extras was 39.13 per cent. Charges

for extras in the public ward amounted to 28.4 per cent in 1949; 27.75 per cent of regular bed rate charges in 1948; in 1947 extra charges for this group were 29.05 per cent; and in 1946 they amounted to 25.35 per cent of what the hospital bill would have been at the regular daily rate.

TABLE A3

CHARGES FOR EXTRA SERVICES IN PUBLIC GENERAL HOSPITALS OF ONTARIO IN 1949

Service	Private and Semi-Private	Public Ward	Total
Operating Rooms	\$1,649,849.82	\$971,471.66	\$2,621,321.48
Delivery Rooms	478,273.71	256,189.56	734,463.27
Laboratory	1,293,060.42	801,246.38	2,094,306.80
Dispensary	1,793,286.88	1,311,808.49	3,105,095.37
Radiology	961,442.18	733,260.87	1,694,703.05
Dressings	151,431.57	84,632.25	236,063.82
Telephones	39,828.38	4,482.02	44,310.40
Special Nurses' Board	255,458.82	27,141.29	282,600.11
Physiotherapy	94,313.50	50,882.59	145,196.09
Sundry	36,881.36	12,596.78	49,478.14
Total	\$6,753,826.64	\$4,253,711.89	\$11,007,538.53

Table A3 illustrates how the \$11,007,538.53 total for extras was made up in 1949.

Charges to private and semi-private patients in Toronto hospitals for extra services amounted to 51.04 per cent of total room revenue from this group of patients in 1949; they were 44.3 per cent in 1948; they were 43.33 per cent of it in 1947, and 37.5 per cent in 1946.

Heaviest extra charges to patients in Toronto hospitals in 1949 were for use of the operating room (\$870,611.23), followed by the dispensary services (\$716,331.24); laboratory (\$585,381.72); and the radiology department (\$380,441.89). Private

and semi-private patients in Toronto hospitals that year paid \$23,192.08 for telephone service in their rooms--more than the same group of patients paid for physiotherapy (\$21,739.76), radiotherapy (\$10,696.25), or dressings (\$9,414.98). Another high point on the bills to private and semi-private patients is a total of \$118,575.61 for special nurses' board. Total extras for this group of patients in 1949 amounted to \$1,900,170.68; for public ward patients it was \$1,044,125.94--a grand total of \$3,034,296.62.

Calculated on a cost-per-patient-day basis, per diem and extra service charges to private and semi-private patients in Toronto hospitals average out like this:

TABLE A4

AVERAGE PER DIEM CHARGES TO PRIVATE AND SEMI-PRIVATE PATIENTS IN TORONTO

Year	Per Diem Room Revenue	Extra Services	Average Per Diem Total
1946	\$ 5.61	\$ 2.11	\$ 7.72
1947	6.46	2.81	9.27
1948	7.18	3.19	10.37
1949	7.26	3.71	10.97

The same calculation for public ward patients, including indigents, shows the following

breakdown between maintenance revenue and charges for extras:

TABLE A5

AVERAGE PER DIEM CHARGES TO PUBLIC WARD PATIENTS IN TORONTO

Year	Per Diem Room Revenue	Extra Services	Average Per Diem Total
1946	\$ 4.14	\$.70	\$ 4.84
1947	4.01	.99	5.00
1948	5.99	1.30	7.29
1949	6.57	1.38	7.95

It is only fair, of course, to point out that hospitals, like all other business in recent years, have been caught in the spiral of rising costs. Salaries, wages and food constitute major groups of

expenditure; and just what has happened over the years in these classifications is shown graphically by the following table:

TABLE A6

PUBLIC GENERAL HOSPITAL OPERATING COSTS IN ONTARIO, 1900 - 1949

Year	(a) Number of Hospitals	(b) Total Operating Cost	Salaries and Wages	% to Total Cost	Dietary Supplies	% to Total Cost
1900	53	\$ 549,063.26	\$ 127,166.89	23.16	\$ 195,878.13	35.67
1930	139	10,937,237.21	4,389,918.79	40.14	2,539,979.02	23.22
1935	143	10,624,823.20	4,549,526.50	42.82	1,887,816.43	17.77
1940	147	12,740,420.34	6,014,332.14	47.20	2,540,391.15	19.91
1945	143	22,484,438.05	11,651,176.56	51.82	4,006,401.43	17.82
1948	149	39,825,207.66	21,591,377.61	54.22	6,705,582.53	16.84
1949	152	45,770,460.39	25,288,617.82	55.25	7,259,092.48	15.86

Note: (a) Public general hospitals, including Red Cross Outposts, Lockwood Clinic and Mothercraft.

(b) Excluding depreciation on buildings and equipment.

Introduction of the eight-hour day for nurses in 1943 brought about a significant increase in operating expenses.

Another important hospital cost item is drugs and medical supplies. In 1900 this totalled \$44,604.77, or 6.73 per cent of total operating cost. By 1946 drugs and medical supplies had reached \$2,653,884.83 (9.5 per cent), in 1948 they totalled \$4,142,568.13 (10.4 per cent), and by 1949 they had reached \$4,808,768.97 (10.51 per cent of total operating cost).

It is clear that there is great need for the most astute buying practice on the part of each hospital and for the best possible system of stock control. An effort is now being made to introduce a standardized inventory control method into all public general hospitals in Ontario, but many are still operating some departments in an inefficient and inadequate manner.

Another point at which standardization would help to boost hospital efficiency and economy is in the use of a single type of claim form for the assignment of hospital charges to the various companies and associations selling hospitalization insurance in the province. At present each one of the dozens of such insurance organizations requires a different form, causing confusion and loss of time in hospital offices, and resulting in many hospitals leaving the filing of claim up to the individual except in the case of the Blue Cross Plan for Hospital Care

and a few of the more popular commercial plans. This means that a substantial number of fully or partially insured patients are lumped together with cash payees in hospital reports to the provincial Department of Health, and consequently no accurate measure can be made of the extent to which hospitalization insurance pays the hospital bills of Ontario patients.

Table A7 gives all the information obtainable from the government records on this point for 1948. It indicates that 21.4 per cent of all Ontario public general hospital patients (not including Red Cross Outposts or Canadian Mothercraft Centre) that year were Blue Cross participants, and that a further 7.5 per cent were municipal indigents; but beyond this there were 71.1 per cent lumped very loosely into "self pay" and "all others" groups. The self-pay would include a substantial number of patients who are covered by one or another of the many commercial or non-profit insurance plans in operation in the province; and "all others" includes indigent patients from the unorganized territories, Workmen's Compensation, cases looked after by service clubs and fraternal organizations, and several other groups.

Figures reported to the Survey Committee by the Blue Cross Plan itself for this same period differ somewhat from the hospitals' reports to the Ontario Department of Health. They indicate that there were 126,727 Blue Cross patients in the

TABLE A7

DISTRIBUTION OF PATIENTS IN PUBLIC GENERAL HOSPITALS IN ONTARIO BY METHOD OF PAYMENT, 1948
(Not including Red Cross Outposts or Canadian Mothercraft Centre)

Hospital Group	Self Pay*		Blue Cross		Municipal Indigents Public Ward	All Other**		Totals	
	Private Semi-Pte.	Public Ward	Private Semi-Pte.	Public Ward		Private Semi-Pte.	Public Ward	Private Semi-Pte.	Public Ward
"A"	39, 573	21, 637	16, 373	10, 117	15, 431	5, 114	4, 065	61, 060	51, 250
"B"	77, 199	75, 936	31, 207	21, 553	14, 596	7, 911	5, 051	116, 317	117, 136
"C"	43, 085	45, 336	12, 470	9, 197	5, 218	4, 131	4, 716	59, 686	64, 467
Total	159, 857	142, 909	60, 050	40, 867	35, 245	17, 156	13, 832	237, 063	232, 853

DISTRIBUTION OF DAYS OF CARE IN PUBLIC GENERAL HOSPITALS IN ONTARIO BY METHOD OF PAYMENT, 1948

Hospital Group	Self Pay*		Blue Cross		Municipal Indigents Public Ward	All Other**		Totals	
	Private Semi-Pte.	Public Ward	Private Semi-Pte.	Public Ward		Private Semi-Pte.	Public Ward	Private Semi-Pte.	Public Ward
"A"	387, 393	256, 979	148, 656	117, 475	337, 872	82, 562	75, 493	618, 611	787, 819
"B"	685, 078	572, 659	269, 737	158, 965	370, 275	114, 067	65, 398	1, 068, 882	1, 167, 297
"C"	387, 398	328, 669	107, 144	59, 383	168, 993	40, 551	69, 370	535, 093	626, 415
Total	1, 459, 869	1, 158, 307	525, 537	335, 823	877, 140	237, 180	210, 261	2, 222, 586	2, 581, 531

*As explained in the text this group includes many patients covered fully or partially by some form of hospitalization insurance not at this time reported to the provincial Department of Health.

**This group includes indigent patients from the unorganized territories, patients looked after by service clubs and fraternal organizations, Workmen's Compensation, and several other types of patient.

TABLE A8

METHODS OF PAYMENT IN TORONTO HOSPITALS, 1948

(by patients not residing in York county)

Method of Payment	Number of Patients	Number of Patient Days
Self Pay	6,983	91,585
Blue Cross	2,544	36,442
Hospital Co-operative	41	976
Insurance	537	7,787
Workmen's Compensation	968	24,023
Municipal Indigents	1,318	38,744
Provincial Indigents	75	2,816
Federal Government Group	64	1,895
Service Clubs	259	6,465
Others	145	4,316
Total	12,934	214,049

hospitals of Ontario in 1948, and that accounts paid on their behalf covered 979,754 days of patient care. These totals are considerably higher than Ontario Department of Health reports on public general hospitals because Blue Cross includes payment to some private hospitals and nursing homes with which they have entered into a cooperating arrangement, as well as a limited number of days' care on behalf of patients in tuberculosis sanatoria and mental hospitals. The difference is further enhanced by the inclusion of a relatively small number of payments by the Ontario Blue Cross Plan on behalf of subscribers who were taken ill while away from home in another province or in the United States.

The above Blue Cross totals for 1948 also include some coverage for emergency cases treated as out-patients. It is estimated that between eight and nine per cent of total accounts paid in 1948 would be for such cases.

It might be noted that of the 126,727 Blue Cross accounts paid in 1948, there were 36,274 (28.7 per cent) paid to Toronto hospitals; and of the total days of care involved, 301,834 (30.8 per cent) were given in Toronto hospitals.

Table A8 gives some indication of the further breakdown that might be made to show how methods of payment are distributed. This sample is an analysis of the hospital records of 12,934 patients from outside York county who were treated in Toronto public general hospitals in 1948.

Recommendations are made elsewhere in this report with respect to the keeping of more adequate records on the treatment of out-patients. Information obtainable is incomplete and lacking in uniformity. In the majority of hospitals, revenue from all out-patients--clinic, emergency department,

and services to private patients--is lumped together. These totals for all public general hospitals in the province are as follows for the four years shown:

1946 -	\$1,893,338.51
1947 -	\$2,524,861.70
1948 -	\$2,921,270.09
1949 -	\$3,184,686.20

One of the most frequent out-patient services, particularly to private patients, is supplied by the radiology departments. There appears to be considerable dissatisfaction and confusion in the variety of arrangements made by hospitals in this province for the remuneration of radiologists. These involve salaries and commissions which range as high as 60 per cent of the entire department's gross revenue. Details of these unusual arrangements are given elsewhere in this report.

It can be seen from this very brief review of the hospital picture in Ontario at the time of this survey that it is a highly complex and demanding business. Obviously the heavy expenditures involved in adding 10,429 new public general hospital beds to the province's 1948 total of 15,212 will require careful consideration; yet this number is shown later in the report to be a realistic estimate of what will be needed by 1954 in the light of current hospitalization trends. This 10,429 total does not include replacement of 4,619 existing beds now considered obsolete.

And the expense does not stop with erecting the necessary hospital buildings and buying equipment. There is already, as is demonstrated in the section on nursing care, an acute shortage of trained nursing personnel. A 68.5 per cent increase in hospital beds will intensify the demand for nurses and nursing assistants, as well as for physicians and all other health workers. Capital expenditures involved will

include the erection of adequate living accommodation and teaching facilities for nurses and students at those hospitals operating schools of nursing.

This should make it clear that the provision of more adequate hospital facilities to minister to the health needs of Ontario is not something to be undertaken lightly--nor is it something which can be left undone. Ontario needs more hospital beds and improvement in the buildings housing some existing beds, and it needs these new facilities properly distributed across the province with due regard to the varying requirements of different regions and to their respective abilities to finance them.

To study, administer and control the operation and expansion of Ontario's hospital facilities is an important, full-time job, in the opinion of the Survey Committee, and it is one that should well repay investment in a Hospital Commission. A recommendation to this effect is made in Chapter I of this report.

In its analysis of present hospital facilities and future hospital needs of Ontario, the Survey Committee found the plan of dividing the province into seven hospital regions (see Map A1) a great aid to efficiency and accuracy. This basic plan was developed as a result of extensive studies of all conditions having any bearing on hospitalization. Geography and transportation facilities were considered, the character and distribution of population, trading areas and other pre-determined divisions, educational facilities available for the training of medical and other health personnel, etc.--all these were weighed in the balance with the existing patterns of hospitalization as revealed by studying the flow of patients to major hospitals in the province. The resulting regional division has already received commendation from persons dealing with health matters on a province-

wide basis, and the Survey Committee has used these divisions throughout its report.

In studying the flow of patients into various hospitals in the province it was discovered that a substantial number of patients come from Quebec province for treatment in Ontario. Thirteen general hospitals in the eastern and north-eastern part of this province treated 4,727 Quebec patients in 1948. In one city one hospital reported 20.05 per cent of its total admissions to be from Quebec, and the general average among its three hospitals was 10.58 per cent. In the case of two other hospitals, more than a quarter of all patients admitted were from Quebec province.

This, then, in general terms, is representative of the ground covered by the hospital facilities section of the Ontario Health Survey Committee report. All discussion and the recommendations arising therefrom are based on firsthand experience of committee field staff in each of the province's hospitals, on numerous interviews and conferences with experienced hospital administrators, nursing superintendents, physicians, and hospital trustees from all parts of Ontario; and on exhaustive studies of the records maintained by the Ontario Department of Health.

It may be noted that no effort has been made here to republish the extensive statistical data on hospitals prepared annually in booklet form by the Hospitals Division, Ontario Department of Health. These are an excellent source of information in volume far out of proportion to the limited staff and equipment available in the department for this work. It would seem unnecessarily costly to repeat what has already been done. Instead, the Survey Committee has gone on to supplement these facts with others and with others and with practical experience, and to assemble material from all sources into as complete a picture as possible of hospital service in the province.

RECOMMENDATIONS

The committee recommends, -

1- Construction of (Chapter VII), -

- (a) 10,429 additional general hospital beds by 1954 (inclusive of the 4,704 planned or under construction as of December 31, 1948) of which 2,336 should be in Toronto Metropolitan area--replacement of 4,619 obsolete beds, (731 in Toronto) is also needed;
- (b) 5,138 convalescent and chronic beds by 1954; of which 1,788 should be located in the Toronto Metropolitan area;
- (c) hospital construction should not be undertaken in any community until study of local conditions has established

the need for additional accommodation, the availability of medical and nursing personnel, and the means for financing and maintaining such accommodation;

2- Extension of the federal and provincial capital grants to include a substantial part of the cost of, -

- (a) nurses' residence (Chapter IV and section on nursing care),
- (b) heating plants, dietary services, laboratories, x-ray departments, occupational and physical therapy departments, and related services (Chapter IV),
- (c) renovation or replacement of obsolete accommodation and facilities (Chapter IV);

- 3- Revision of the provincial maintenance grants in order to provide for a more equitable distribution of these grants to hospitals (Chapter II);
- 4- Payment of a special provincial and municipal grant for out-patient services, if and when adequate out-patient records are kept by hospitals (Chapter XI);
- 5- Establishment of a Hospital Commission with powers affecting the following matters (Chapter I), -
 - (a) the distribution of federal and provincial grants to hospitals,
 - (b) applications to build new hospital accommodation,
 - (c) inspection of hospitals in every respect, including the arrangements for treatment, buildings, services, administration, and accounting.
 - (d) establishment of a procedure to provide for the arbitration of any issues arising out of the administration of individual hospitals,
 - (e) maintaining studies and research into all matters relating to the improvement and extension of hospital facilities;
- 6- Division of the province into hospital regions (Summary) and the establishment of regional boards (Chapter I) to which would be delegated some of the functions described in recommendation No. 5;
- 7- Measures to provide training for additional hospital personnel to meet the following shortages existing at the time of this survey (Chapter VIII), i. e. -
 - 22 pathologists
 - 25 radiologists
 - 99 laboratory technicians
 - 209 radiographers
 - 35 laboratory-radiographer technicians
 - 176 dietitians
 - 91 pharmacists
 - 94 physiotherapists
 - 36 occupational therapists
 - 52 combined occupational-physiotherapists
 - 128 medical record librarians;
- 8- Inspection of all hospitals by competent fire-prevention officials and elimination of the many existing fire hazards (Chapter IV);
- 9- Provision of laboratory and x-ray services to residents of all parts of the province of Ontario on a regional basis and at reasonable cost (Chapter VIII);
- 10- That measures be taken to ensure that patients in public general hospitals are not being overcharged for extra services, in view of the rapidly mounting revenues reported from this source (Summary);
- 11- Provision of safe, segregated sections for the treatment of communicable diseases in public general hospitals where feasible;
- 12- That the Department of Health of Ontario enforce the existing regulations covering the medical record of every patient admitted (Chapter IV);
- 13- That the provincial government require more prompt and accurate reporting by hospitals to the Ontario Department of Health and where necessary implement the existing regulations which provide for the enforcement of such reporting (Summary);
- 14- A more complete and accurate record of methods of payment to hospitals and standardization of the assignment forms required by insurance companies (Summary);
- 15- That a set of by-laws covering all phases of activity of the medical staff be evolved and it is suggested that these by-laws be evolved by the collaboration of the Department of Health of Ontario, the Ontario Medical Association, the College of Physicians and Surgeons of Ontario and the Ontario Hospital Association;
- 16- That in hospitals for the chronically ill, the standards of nursing and medical care be improved and the facilities and service offered patients be improved and extended;
- 17- That sufficient staff and modern mechanized equipment be provided in the Public Hospitals Division of the Ontario Department of Health to enable the division to cope with the rapidly increasing volume of hospital recording and other matters entrusted to the division. (The numerical strength of the division is the same today as it was in 1934, notwithstanding the tremendously increased volume of hospital activity).

CHAPTER 1

HOSPITAL ADMINISTRATION IN ONTARIO

The Survey Committee has discussed the question of whether the administrative organization of hospitals, under existing hospital legislation, is adequate, and concludes that some expansion and reorganization are needed to cope with the rapidly growing volume of hospital activities.

Existing Organization

The services to be administered comprise those which are provided by (a) public hospitals and (b) private hospitals.

(a) Public Hospitals

These are hospitals which have been approved under the Public Hospitals Act, R. S. O. 1937, Chapter 390, and are the hospitals referred to colloquially as "general hospitals" and the convalescent and chronic hospitals.

A list of these hospitals is contained in the regulations under the Public Hospitals Act, and is reproduced in Chapter III of this report.

On December 31, 1948, there were 158 hospitals in use in the province as follows, -

Public general hospitals	123*
Red Cross Outposts	23
Chronic and incurable hospitals	10
Convalescent hospitals	2
Total	158

These hospitals are grouped in seven groups lettered A, B, C, etc. as explained in Chapter III. This grouping is used in determining the amount of the annual maintenance grant from the government under the Hospitals Aid Act, as explained in Chapter II. For example, a hospital in group "A" receives a higher grant than a hospital in one of the other groups, and so on.

Each hospital is a separate legal, financial and administrative unit.

The ownership of the hospitals may be summarized as follows, -

As of December 31, 1948, the public general hospitals were operating 15,212 beds (excluding bassinets and excluding the convalescent and chronic hospitals). Voluntary associations owned 42.49 per cent of the beds. Religious orders owned 31.34 per cent and municipalities owned 23.84 per cent. The Canadian Red Cross Society owned 1.80 per cent, and other types of ownership accounted for the remaining .53 per cent of beds.

With respect to isolation and chronically ill and convalescent hospitals, ownership was: voluntary associations 37.79 per cent, religious orders 32.01 per cent, and municipalities 30.20 per cent.

* This treats Wellesley Hospital as a part of Toronto General, and excludes Canadian Mothercraft Centre.

The financing of a public hospital proceeds upon the following basis. The administrative authority in charge of the hospital (corporation, municipality, religious order, etc.) collects monies for maintenance from, --

- (a) patients who can pay,
- (b) municipal statutory grants,
- (c) provincial statutory grants,
- (d) such voluntary gifts or bequests as it may receive from the public, municipalities, etc.

Each hospital authority has the power and the duty to operate, maintain, and administer the hospital. The hospital authority appoints the medical staff, employs and pays the nursing and administrative staff, provides the buildings, services and equipment, enacts by-laws for the management of the hospital, and in general does all things necessary for the functioning of the hospital.

The only supervision or control which is exercised from outside the hospital is that which is vested in the Minister of Health and his officials by the Public Hospitals Act and the regulations.

The power of the Minister of Health and his department may be summarized as follows:

- (i) to administer the capital grant for the building of new hospitals or the enlargement of an existing hospital;
- (ii) to administer the annual maintenance grant for public ward patients;
- (iii) to recommend to the Lieutenant-Governor-in-Council the approval or otherwise of a hospital as a public hospital (Public Hospital Act, section 3);
- (iv) to recommend to the Lieutenant-Governor in Council regulations

dealing with a wide range of subjects, such as classification, inspection, treatment of patients, records, audits, etc. (Public Hospitals Act, section 4);

- (v) the appointment of inspectors (Public Hospitals Act, section 6).

(b) Private Hospitals

These institutions are governed by the Private Hospitals Act, R.S.O. 1937, Chapter 391, and the regulations. Private hospitals differ from public hospitals in that a private hospital is not entitled by statute to any financial assistance from either the province or from municipalities. The private hospital is usually operated by its proprietor for gain.

The term "private hospital" is defined in clause (h) of section 1 of the Act, and in a general way it means a house in which four or more patients are accommodated.

A private hospital requires a license from the Minister of Health.

As noted elsewhere in this report, there are many institutions operating in Ontario without a license.

Under the Act and the regulations, the Minister has wide powers over every aspect of the functioning of a private hospital.

The Minister, with the approval of the Lieutenant-Governor-in-Council, may designate inspectors (Private Hospitals Act, section 4).

Deficiencies in the Existing Organization

From the foregoing description, it will be seen that the only outside control that is exercised over public and private hospitals is that which is vested in the Minister of Health and his officials.

From the number and distribution of the hospitals, it is obvious that a central organization is necessary in order to exercise proper control and supervision. The control to be exercised includes on the one hand, control over financial and administrative matters, and on the other hand, control over professional matters relating to the care and treatment of patients. It follows, therefore, that the central organization must include a staff which is adequate in number and includes some officials with medical qualifications and some with administrative and financial qualifications.

In the opinion of the committee, the existing organization in the Department of Health is too limited in personnel and equipment to discharge these duties adequately.

This is exemplified by the fact that the Survey Committee has found that 587 institutions,

containing 4,057 beds, are operating without any form of approval, license or inspection, except in some instances where the institution has been approved by the local medical officer of health under the Maternity Boarding Houses Act.

In the present organization there is only one medical inspector for public hospitals and only one medical inspector for private hospitals. The Survey Committee is of the opinion that this is not a sufficient staff to exercise adequate supervision over the professional activities conducted by hospitals. It is the Committee's further opinion that the mere employment of additional inspectors would not answer the needs. Recommendations in this respect are contained in the concluding paragraphs of this part of the report.

It is doubtful, in fact, whether in practice the existing system provides for enough supervision or control over the professional aspects of hospital administration relating to the care and treatment of patients. Each hospital acts as an independent unit, appointing its own medical staff. A member of the medical staff may be removed by the hospital board only upon the recommendation or with the consent of a committee of the medical staff (Public Hospitals Act, regulation 8).

There is some doubt in the minds of the committee whether the existing system would bring to light weaknesses and deficiencies in the provision for the care and treatment of patients in some hospitals. It is also doubtful whether the organization of the medical staff in some hospitals is constituted so as to take remedial action to overcome any weaknesses or deficiencies which may exist.

It is necessary that some central authority should determine the location of new hospitals and the extension of existing hospitals. New accommodation should be provided where the need is greatest, and there should be no unnecessary duplication or overlapping in service provided by two or more hospitals operating in the same locality.

Plan for Improved Organization

There are two elements involved in the organization plan recommended by the committee which may be designated as (a) the central organization and (b) the regional organization.

(a) Central Organization

This involves a decision between two alternative types of central organization. The first alternative is to continue the present system of administration. The other alternative is to establish a separate commission or board.

There are advantages in administration by a commission. The committee points out at least two advantages.

First, a commission would be comprised of members representing the public, the medical

profession and the hospitals. It is reasonable to suppose that doctors and hospitals would accept more readily measures of control imposed by a commission upon which they were represented.

Second, a commission could deal with hospital matters in an objective and impartial manner. In this connection it should be noted that in many localities there are two or more hospitals serving the same population. An element of competition is a natural development in this situation. The spirit of competition may impart a zeal for unnecessary expansion or for unnecessary duplication of services. This may lead to exertion of influence or pressure in order to secure approval and grants. A commission should be able to deal with such applications in an objective way.

Constitution of Hospital Commission

The committee recommends that a hospital commission of at least three members be appointed by the Ontario Government. The members of the commission would doubtless spend a large part of their time on the affairs of the commission and should be compensated accordingly.

The commission should have power to appoint a medical advisory board and any other advisory assistance deemed essential.

The commission should have authority to employ and pay the necessary staff.

Functions of Hospital Commission

The hospital commission would exercise some of the powers now vested in the Minister of Health and described earlier in this chapter. In

the exercise of these powers, the commission would be responsible to the Minister of Health, and through him to the Legislature of Ontario.

The hospital commission should be assisted by recommendations from regional boards respecting such matters as additions to existing hospitals, construction of new hospitals, etc.

In connection with decisions relating to the medical staff, the hospital commission should be guided by the advice of its medical advisory board.

Regional Administration

The committee recommends the establishment of a regional board in each hospital region of the province. Map A1 shows the division of the province into the seven hospital regions used during the survey.

The regional hospital board should be so constituted as to provide representation for the hospitals, the medical profession and the municipalities (counties, cities and separated towns) within the region.

The regional hospital board should be assisted by a regional medical advisory board nominated by the Ontario Medical Association or some other medical body competent to speak for the medical practitioners in the region.

The regional board would be responsible for making recommendations to the hospital commission on the allocation of the capital construction grants, the distribution of provincial maintenance grants, the elimination of unnecessary or duplicating services, maintenance of proper standards of care and treatment of patients, etc.

CHAPTER II

PROVINCIAL GOVERNMENT MAINTENANCE GRANTS TO PUBLIC HOSPITALS

Source of Provincial Grant Monies

Until the year 1948, provincial grants for public hospitals were paid out of the consolidated revenue fund. In other words, there was no special tax for hospitals and the grants were paid out of the general revenues of the province.

In 1948, when the Dominion Government abandoned the collection of an amusement tax, the Province of Ontario stepped into this field. An Act was passed entitled The Hospital Tax Act, 1948 (Statutes of Ontario, 1948, Chapter 41). This Act established a provincial amusement tax which was to be paid into a special fund for public hospitals (section 4).

At the same time, an Act was passed called the Hospitals Aid Act, 1948, (Statutes of Ontario, 1948, Chapter 40). This Act provided for a "hospital aid fund" into which would be paid monies appropriated by the legislature and the monies collected under the Hospital Tax Act. The capital and maintenance grants would be paid out of this fund.

This arrangement was altered in the year 1950. The Hospitals Aid Act was repealed and most of its provisions re-enacted under the Public Hospitals Act (see the Public Hospitals Amendment Act, 1950, Chapter 62).

At the same time the provision for the special "hospital aid fund" was repealed (The Hospital Tax Amendment Act, 1950, Chapter 27, section 4).

Briefly, the situation now is that monies collected under the Hospital Tax Act are paid into the consolidated revenue fund and any grants to hospitals are paid out of this fund.

Present System of Distributing Grants

The present system of hospital maintenance grants was introduced in 1943 and applied to all hospitals in 1947. It supplanted a plan in which a payment was made on a patient-day basis with respect to:

- (a) municipal indigents
- (b) self-pay public ward patients who paid a rate not in excess of the statutory municipal rate.

Adoption of the present system introduced the principle that some measure of assistance should

be extended to public ward patients who pay a rate in excess of the statutory municipal rate for indigents.

The existing system pays grants on the basis of the government-recognized public ward bed capacity in relation to the government-recognized bed capacity of the entire hospital. It was the intention of the formula adopted in 1947 to make provision for adjusting this figure to the actual occupancy level in the public ward as reported by the hospital to the government.

Under the Public Hospitals Act there are seven groups--"A" to "G"--and each public hospital in the province is placed in one or another of these groups. Maximum per diem grants were set by the government for each hospital group. These arbitrary limits, which interfere with the functioning of the formula in practice, are as follows:

Group "A" -	\$1.00	(These are the basic maximum limits as originally established. As of April 1, 1948, they were increased to 235 per cent in an effort to meet rising hospital costs).
Group "B" -	.75	
Group "C" -	.60	
Group "D" -	.60	
Group "E" -	.60	
Group "F" -	.64	
Group "G" -	.60	

In the case of Group "A" hospitals, which are those hospitals officially qualified to provide instruction to medical students, the maximum per diem grant set forth in the above table is also the minimum payment which they can receive. In all other groups, payments may range below the maximum depending upon the occupancy and public ward total bed percentages.

This grouping of hospitals was established in 1943 on the basis of a cost study conducted at that time. This study reported the per diem cost of public ward patient care as follows:

Group "A" -	\$4.43
Group "B" -	3.84
Group "C" -	3.40
Group "D" -	3.40
Group "E" -	2.94
Group "F" -	2.30
Group "G" -	2.23

In practice, the amounts set by statute as a minimum payment in 1943 by each municipality for its indigent patients are deducted from the above per diem cost figure, and the grant formula is applied to the remainder. This statutory minimum per diem municipal indigent payment is set forth

here, together with the remainder after its deduction from the above cost figures:

	Statutory Municipal Per Diem Indigent Payment (1943)	Remainder After Deduction From 1943 Per Diem Cost Figure
Group "A"	\$2.25	\$2.18
Group "B"	2.25	1.59
Group "C"	2.25	1.15
Group "D"	2.25	1.15
Group "E"	1.50	1.44
Group "F"	1.50	.80
Group "G"	1.50	.73

The above table shows the 1943 municipal grants, upon which this formula calculation is based. In actual practice the municipal grants were increased in 1948 and again for the year 1951. These new municipal grant rates are set forth here, although it is the 1943 rate that remains as a part of the provincial grant formula.

	Statutory Municipal Per Diem Indigent Grant for 1948	Statutory Municipal Per Diem Indigent Grant for 1951
Group "A"	\$3.00	\$4.00
Group "B"	2.50	3.50
Group "C"	2.25	3.00
Group "D"	2.25	3.00
Group "E"	2.25	2.50
Group "F"	2.25	2.50
Group "G"	2.25	2.50

Example of Grant Formula Applied

The following figures are for a typical Class "C" hospital in the year 1949:

Total government-rated bed capacity - 54 beds.	
Number of government-recognized public ward beds - 26 beds.	
Percentage occupancy of public ward beds - 97.1 per cent.	
Percentage of public ward to total beds - 48.1 per cent.	
Per diem cost, Class "C" hospitals (1943 basis) -	\$3.40
Less municipal payment for indigents per diem ---	\$2.25
Remainder ---	\$1.15

Basic rate, therefore, is

$$\frac{97.1}{100} \times \frac{48.1}{100} \times 1.15 = 54 \text{ cents.}$$

Basic rate of 54 cents multiplied by 2.35* = \$1.269

*(Factor 2.35 represents an increase effective April 1, 1948, in an effort to compensate for changes in costs since the 1943 cost study.)

Potential public ward patient days 26 x 365 = 9,490

Therefore 1949 grant is 9,490 x \$1.269 = \$12,042.81

Criticism of Present System

There are five major criticisms of the present grant system.

1. The inadequacy of the present grant system obliges many hospitals to charge private and semi-private patients more than the actual cost of their own care in order to assist in paying for that part of the indigent patient's cost which is not borne by the provincial and municipal statutory grants.
2. It is based upon a 1943 cost study, now obsolete.
3. It pays only on the basis of government-recognized public ward bed capacity, which today is substantially lower than the actual bed complement in the majority of hospitals; and it thus works a severe hardship upon those hospitals which are giving needed service in extra public ward beds they have set up to meet the demand for hospitalization.
4. The arbitrary maximum fixed for each group of hospitals destroys the flexibility of the formula, which was intended to recognize the actual public ward patient-day cost.
5. Hospitals are now paid an amount which is calculated by multiplying the 1947 grant by 2.35. In other words, the hospital receives 235% of its 1947 grant without regard to the fact that the hospital may be treating a greater or lesser number of public ward patients than it treated in 1947.

These criticisms are supported by an examination of the amounts actually received by public hospitals in Ontario in the year 1949. Quite apart from the fact that the total amount of the 1949 maintenance grants (\$5,628,575.25) may have been inadequate in terms of total public ward hospital service delivered (by reason of criticisms noted above), the distribution of this total among the various hospitals was highly inequitable. Some hospitals received thousands of dollars more, others less than they would have received had the formula been brought up to date in terms of costs and patient days.

Table A9 bears this out. It shows in three parallel columns the maintenance grants actually paid in 1949 to 18 hospitals (all of Class "A" and samples from Classes "B" and "C"), and what these hospitals would have received had the total grants for their classifications been apportioned according

TABLE A9

SHOWING HOW THE TOTAL 1949 PROVINCIAL GRANT FOR MAINTENANCE WOULD BE
DISTRIBUTED ON TWO DIFFERENT BASES

HOSPITAL	MAINTENANCE GRANT PAID IN 1949	1949 GRANT REDIS- TRIBUTED ACCORDING TO ACTUAL DAYS OF INDIGENT PATIENT CARE	1949 GRANT REDISTRI- BUTED ACCORDING TO ACTUAL DAYS OF PUBLIC WARD PATIENT CARE
Class "A" hospitals complete group	Hospital - No. 1	\$97,697.72	\$73,893.99
	Hospital - No. 2	163,041.12	120,631.72
	Hospital - No. 3	19,402.30	45,501.85
	Hospital - No. 4	147,026.92	272,678.86
	Hospital - No. 5	89,368.97	144,160.06
	Hospital - No. 6	349,104.25	246,373.10
	Hospital - No. 7	309,647.75	414,460.18
	Hospital - No. 8	743,716.25	656,215.32
	Hospital - No. 9	253,894.00	198,984.20
Total Class "A"	\$2,172,899.28	\$2,172,899.28	\$2,172,899.26
Class "B" samples	Hospital - No. 1	\$75,765.05	\$82,627.75
	Hospital - No. 2	66,093.75	48,257.37
	Hospital - No. 3	293,993.81	437,483.57
	Hospital - No. 4	26,315.77	17,918.82
	Hospital - No. 5	90,063.75	68,150.54
Class "C" samples	Hospital - No. 1	\$16,983.45	\$10,658.75
	Hospital - No. 2	22,129.95	240.97
	Hospital - No. 3	12,042.81	6,506.09
	Hospital - No. 4	13,200.77	13,000.14

to (1) indigent patient days, and (2) public ward patient days.

Taking Class "A" for example, a redistribution on an indigent day basis would result in five hospitals sharing a loss of \$311,355.01 from their 1949 grants, and in the four remaining hospitals in this class sharing this gain. The largest single loss under this system would amount to \$102,731.15; largest gain \$125,651.94.

Redistribution of the same Class "A" total grant (\$2,172,899.28), according to public ward patient days for the year 1949 would result in less drastic adjustments. Only four hospitals would receive smaller grants, and the greatest single loss would amount to \$53,408.04. The five remaining Class "A" hospitals would gain larger grants, but the largest individual increase would be \$67,995.33. It might be noted also that maximum gains and losses under either of these redistribution plans involve the same two hospitals.

Experience in Class "B" and Class "C" hospitals is similar under such a redistribution, although the amounts involved are in individual cases substantially smaller.

These criticisms are sufficient to recommend very strongly that a thorough overhauling of the whole grant structure is urgently needed.

The foregoing calculations have been made to demonstrate the inequities of present grant distribution; the question of the total grant's adequacy or inadequacy cannot be settled without the prior completion of an intensive study of public ward and indigent patient care costs in every hospital in the province. This, in the opinion of the Survey Committee, is a prerequisite to a much needed improvement in the grant system.

Factors Affecting Revision of Grants

In its study of the value of the present system for determining provincial maintenance grants to hospitals, the Survey Committee came to an appreciation of certain factors which should be taken into consideration in establishing future grant policy. In brief, they are these--

1. Any grant on the basis of recognized public ward days of care necessarily involves payment on behalf of some public ward patients who carry certain forms of hospitalization insurance. If no grant were paid on public ward patients who are not indigent, all per diem rates, including those paid by organizations which pay the prevailing public ward rate, would have to be higher.
2. To keep in touch with the changing realities of hospital economics and

to avoid the arbitrary and inequitable structure of present grants, there is a fundamental need for a continuing cost study of all hospitals receiving grant monies. This might be carried out most effectively by a travelling staff of auditors paying regular visits to each hospital and functioning under some such authority as the proposed Ontario Hospital Commission.

3. If any such classification of hospitals as the present "A" to "G" plan is to be used, provision should be made for the periodic review of classifications to ascertain whether changing circumstances within individual hospitals may have made them eligible for reclassification.
4. Where payment of grants on behalf of indigent patients is concerned, it is desirable to require a sufficient part of the total cost from municipalities so that they will exercise close local control over certification of indigents.
5. Although the present shortage of hospital accommodation has resulted in some conscientious hospitals setting up extra beds for which they receive no maintenance grant, it would be extremely difficult to devise any system of grants based on actual bed complement rather than government-recognized bed capacity. The policy of recognizing only the number of beds in a given hospital which it is considered good practice to operate in a given amount of space provides a measure of control against the crowding of hospital wards.

What Maintenance Grants Have Amounted To

Table A10 shows what provincial maintenance grants have totalled from 1900 to 1949, and relates these figures to hospital operating costs and hospital incomes for the respective years. This table reflects the changing basis for making annual grants as well as the tremendous increase in hospital activity in Ontario during this half century.

Bonus Grant Paid

In the early part of 1950, the provincial government paid a special bonus maintenance grant to all hospitals operating under the Public Hospitals Act (including public general, hospitals for incurables, convalescent hospitals and Red Cross Outposts). This amounted to \$1,389,854.36, comprising 25 per cent of the regular maintenance grant for the year. Three quarters of this bonus was applicable to 1949, and one quarter to 1950.

TABLE A10

PROVINCIAL MAINTENANCE GRANTS TO PUBLIC GENERAL HOSPITALS IN
ONTARIO, 1900 - 1949, RELATED TO OPERATING COSTS AND INCOME
(including Red Cross Outpost, Lockwood Clinic and Canadian Mothercraft Centre)

Year	Operating Cost not including Depreciation but including Interest and Capital charges	Total Income Less Provincial Government Grant	Provincial Government Grant for Maintenance	Provincial Grant as % of Operating Cost	Grant as % of Income Less Grant
1900	\$ 549,063.26	\$ 479,512.91	107,276.65	19.54%	21.33%
1905	829,083.20	711,051.85	103,493.99	12.48	14.56
1910	1,265,216.69	1,172,804.05	139,611.36	11.03	11.90
1915	2,272,826.41	2,199,521.76	189,063.21	8.32	8.60
1920	5,849,222.77	5,334,378.08	346,150.30	5.92	6.49
1925	7,212,338.02	6,472,810.01	640,261.50	8.88	9.89
1930	10,937,237.21	10,922,431.52	971,947.00	8.89	8.90
1933	9,862,108.12	9,325,282.48	1,059,432.22	10.74	11.36
1938	12,263,472.66	11,814,364.78	1,209,104.66	9.86	10.23
1943	17,841,012.32	18,115,706.40	781,255.98	4.30	4.31
1944	20,170,530.74	20,293,111.98	914,965.84	4.54	4.51
1945	22,826,061.38	22,860,355.74	811,891.93	3.56	3.55
1946	27,270,162.97	28,860,798.77	1,399,254.60	5.13	4.85
1947	33,837,673.71	34,921,242.14	1,836,878.17	5.43	5.26
1948	40,253,364.72	38,383,963.06	3,887,876.76	9.66	10.13
1949	45,770,460.39	43,314,807.32	4,672,076.54	10.21	10.79

CHAPTER III

ONTARIO'S HOSPITAL INVENTORY

Classification of Hospitals

For the purpose of allocating grants, the Public Hospital Act, Revised Statutes of Ontario 1937, Ch. 390, classifies all institutions within its jurisdiction as public general hospitals, convalescent hospitals, hospitals for incurables, and hospitals for chronic patients.

The Act then proceeds to group them as follows:

Group A -- Those public general hospitals providing facilities for giving instruction to medical students of any university.

Group B -- Public general hospitals having 100 or more beds; or those with fewer than 100 beds but in a municipality in which a Group A hospital is located.

Group C -- Public general hospitals with fewer than 100 beds and not located in the same community with a Group A teaching hospital.

Group D -- Red Cross Outpost hospitals.

Group E -- Convalescent hospitals.

Group F -- Hospitals for incurables or for chronic patients having 200 or more beds.

Group G -- Hospitals for incurable or for chronic patients having fewer than 200 beds.

Table All lists Ontario's 158 public general, convalescent and chronic hospitals by name and location, and shows nine in Group A, 34 in Group B, 80 in Group C, 23 Red Cross Outpost units in Group D, two in Group E, four in Group F, and six in Group G, as of December 31, 1948, basic date of this survey.

Number of Hospital Beds in Ontario

In addition to those institutions grouped above, in-bed care is offered in Ontario Mental Hospitals, tuberculosis sanatoria, private hospitals, nursing homes, and school and other infirmaries. Table A12 shows the number of beds available in all these places at the date of the survey.

The total figure of 45,282 is manifestly conservative, inasmuch as it uses the official rated capacity of 15,212 beds for public general hospitals and this fails to take into account the extra beds (estimated at more than 2,500) set up in corridors and sun porches in an effort to meet the heavy demand for hospital care in recent years. Also it includes an estimate of 4,057 nursing home beds;

and since there is no official record whatsoever of these homes, the Survey Committee could only count the beds in the 587 nursing homes its field staff could discover. (This latter, unregulated group is dealt with at length in a separate section of this report.)

Ontario Mental Hospitals and TB sanatoria are also covered in detail in other sections of this report. The remainder of this hospital facilities section is concerned primarily with the pro-

vince's public general hospitals, and to a lesser extent with convalescent, chronic and private hospitals.

Information used in this report is the result of survey field staff visits to each hospital and the compilation and analysis of a comprehensive schedule of information on each individual unit. These schedules of information have been submitted to the Minister of Health as an appendix to the report proper.

The Canadian Mothercraft Centre, Toronto, operates under the Public Hospitals Act, but it does not function as a public general hospital and is consequently not considered as one for the purposes of this report. Similarly there are five convalescent summer camps classified as convalescent hospitals in the Department of Health annual report, but since they are not part of the hospital accommodation continuously available to the public, they are not treated here. They serve a convalescent and recreative function for handicapped children, and they are therefore dealt with in the section of this survey on handicapping conditions in children.

Public General Hospitals

This group of hospitals, varying in size from two beds (Red Cross Outpost at Wilberforce) to 1,408 beds (Toronto General), comprises 146 institutions. Table A13 gives their distribution by size across the seven hospital regions.

Table A13 reveals that most Ontario public general hospitals have relatively few beds--110 of them (75 per cent) are under 100 beds, more than half the total are under 50-bed capacity. Nearly 75 per cent (11,222) of the province's total public general hospital bed capacity, however, is in 100-bed and larger hospitals; and these provide more than 75 per cent of all hospital care.

TABLE A11

ONTARIO'S HOSPITAL INVENTORY

(from Public Hospitals Act) as of December 31, 1948.

GROUP A HOSPITALS		GROUP C HOSPITALS (Cont'd.)	
Name	Location	Name	Location
Toronto General Hospital	Toronto	The General Hospital	Pembroke
St. Michael's Hospital	Toronto	General & Marine Hospital	Owen Sound
Toronto Western Hospital	Toronto	St. Joseph's Hospital	Guelph
Victoria Hospital	London	St. Joseph's Hospital	Peterborough
The Hospital for Sick Children	Toronto	Woodstock General Hospital	Woodstock
Kingston General Hospital	Kingston	Orillia Soldiers' Memorial	Orillia
Hotel Dieu Hospital	Kingston	The Parry Sound General Hosp.	Parry Sound
St. Joseph's Hospital	London	Cornwall General Hospital	Cornwall
Ottawa General Hospital	Ottawa	Victoria Hospital	Renfrew
GROUP B HOSPITALS		Galt General Hospital	Galt
Hamilton General Hospital	Hamilton	St. Vincent de Paul Hosp.	Brockville
Ottawa Civic Hospital	Ottawa	Douglas Memorial Hospital	Fort Erie
St. Joseph's Hospital	Toronto	General & Marine Hospital	Collingwood
Toronto East General	Toronto	The Ross Memorial Hospital	Lindsay
The Brantford General Hospital	Brantford	Royal Victoria Hospital	Barrie
St. Joseph's Hospital	Sarnia	St. Paul's Hospital	Hearst
Hotel Dieu of St. Joseph's	Windsor	The York County Hosp. Corp.	Newmarket
McKellar General Hospital	Fort William	Smiths Falls Public Hosp.	Smiths Falls
St. Joseph's General Hospital	Port Arthur	Pembroke Cottage Hosp. Assoc.	Pembroke
Kitchener-Waterloo Hospital	Kitchener	Norfolk General Hospital	Simcoe
Salvation Army Grace Hospital	Windsor	St. Andrew's Hospital	Midland
St. Joseph's Hospital	Sudbury	The Great War Memorial	
The St. Catharines General	St. Catharines	Hospital of Perth District	Perth
Public General Hospital	Chatham	Plummer Memorial Public Hos.	Sault Ste. Marie
Oshawa General Hospital	Oshawa	The General Hospital	Strathroy
St. Joseph's Hospital	Hamilton	LeVerendrye Hospital	Fort Frances
Women's College Hospital	Toronto	St. Joseph's Hospital	Parry Sound
Hotel Dieu Hospital	Cornwall	The Port Hope Hospital	Port Hope
Niagara Falls General Hospital	Niagara Falls	St. Joseph's Hospital	Kenora
The Gen. Hosp. of Port Arthur	Port Arthur	Arnprior & Dist. Memorial	Arnprior
Brockville General Hospital	Brockville	Kenora General Hospital	Kenora
Belleville General Hospital	Belleville	Memorial Hospital	Listowel
Metropolitan General Hospital	Windsor	Peel Memorial Hospital	Brampton
St. Mary's Hospital	Kitchener	St. Francis General Hospital	Smiths Falls
St. Joseph's Hospital	Chatham	Wingham General Hospital	Wingham
Sarnia General Hospital	Sarnia	County of Bruce General Hosp.	Walkerton
The Peterborough Civic Hos.	Peterborough	The Willett Hospital	Paris
Stratford General Hospital	Stratford	Mattawa General Hospital	Mattawa
Welland County General Hos.	Welland	Lady Minto Hospital	Cochrane
Mount Sinai Hospital of Tor.	Toronto	St. Joseph's General Hospital	Blind River
Salvation Army Grace Hospital	Toronto	Charlotte Eleanor Englehart	Petrolia
Lockwood Clinic	Toronto	Alexandra Marine & General	Goderich
St. Joseph's Hospital	North Bay	Queen Victoria Memorial Hosp.	North Bay
The Salvation Army Grace Hosp.	Ottawa	The Tillsonburg Soldier's Mem.	Tillsonburg
GROUP C HOSPITALS		Anson General Hospital	Iroquois Falls
The General Hospital	Sault Ste. Marie	St. Jean de Brebeuf Hospital	Sturgeon Falls
St. Mary's Hospital	Timmins	Alexandra Hospital	Ingersoll
Memorial Hospital	St. Thomas	Misericordia Hospital	Haileybury
Guelph General Hospital	Guelph	Stevenson Memorial Hospital	Alliston
General Hospital	Pembroke	Prince Edward County Hosp.	Pictou
		Lady Minto Hospital	Chapleau
		Cobourg General Hospital Assoc	Cobourg
		Groves Memorial Hospital	Fergus
		Kincardine General Hospital	Kincardine

TABLE A11 (Cont'd.)

GROUP C HOSPITALS (Cont'd.)		GROUP G HOSPITALS	
<u>Name</u>	<u>Location</u>	<u>Location</u>	<u>Name</u>
Porcupine General Hospital	South Porcupine	Parkwood Hospital for Incurables	London
St. Joseph's General Hospital	Little Current	The Runnymede Hospital	Toronto
Lord Dufferin Hospital	Orangeville	St. Peter's Infirmary	Hamilton
Hanover Memorial Hospital	Hanover	The Perley Home for Incurables	Ottawa
Bowmanville Hospital	Bowmanville	St. Mary's-of-the-Lake Hospital	Kingston
Saugeen Memorial Hospital	Southampton	The Home for Incurable Children	Toronto
Haldimand War Memorial Hospital	Dunnville	Misericordia Hospital*	Haileybury
Scott Memorial Hospital	Seaforth	Memorial Hospital*	St. Thomas
General Hospital	Penetanguishene	Brantford General Hos.*	Brantford
West Lincoln Memorial Hospital	Grimsby	McKellar General Hos.*	Fort William
Clinton Public Hospital	Clinton	Kitchener-Waterloo General Hospital*	Kitchener
Durham Memorial Hospital	Durham		
Sioux Lookout General Hospital	Sioux Lookout		
Rosamond Memorial Hospital	Almonte		
Notre-Dame Hospital	Hawkesbury		
Louise Marshall Hospital Ltd.	Mount Forest		
Palmerston General Hospital	Palmerston		
Rosedale War Memorial Hospital	Matheson		
Niagara Cottage Hospital	Niagara-on-the-Lake		
Kirkland & District Hospital	Kirkland Lake		
Chesley & District Memorial Hosp.	Chesley		
Winchester & District Memorial	Winchester		
GROUP D HOSPITALS			
Red Cross Outpost	Dryden		
Red Cross Outpost	Bracebridge		
Lady Minto Hospital	New Liskeard		
Red Cross Outpost	Emo		
Red Cross Outpost	Espanola		
Red Cross Outpost	Mindemoya		
Red Cross Outpost	Thessalon		
Red Cross Outpost	Englehart		
Red Cross Outpost	Bancroft		
Red Cross Outpost	Richard's Landing		
Red Cross Outpost	Haliburton		
Red Cross Outpost	Hawk Junction		
Red Cross Outpost	Rainy River		
Red Cross Outpost	Beardmore		
Red Cross Outpost	Nakina		
Red Cross Outpost	Hornepayne		
Red Cross Outpost	Apsley		
Red Cross Outpost	Lion's Head		
Red Cross Outpost	Port Loring		
Red Cross Outpost	Whitney		
Red Cross Outpost	Atikokan		
Red Cross Outpost	Wilberforce		
Red Cross Outpost	Red Lake		
GROUP E HOSPITALS			
St. John's Convalescent Hospital	Newtonbrook		
Hillcrest Convalescent Hospital	Toronto		
GROUP F HOSPITALS			
The Queen Elizabeth for Incurables	Toronto		
Our Lady of Mercy Hospital	Toronto		
East Windsor Hospital	Windsor		
St. Vincent Hospital for Incurables	Ottawa		
		*Not separate hospitals, but divisions of general hospitals.	

TABLE A12

BEDS FOR HOSPITAL CARE IN ONTARIO

(in basic year 1948)

	Number of Beds	Percentage of Total Beds
VOLUNTARY AUSPICES		
Public General Hospitals	15,212	33.59
Isolation Hospital beds	404	.89
Convalescent Hospitals	285*	.63
Hospital beds for Long Term Patients	1,980	4.37
Universities, Colleges and Schools	552	1.22
Sanatoria	3,941	8.70
Private Hospitals	902	1.99
Private Hospitals for the Mentally Ill	263	.58
Nursing Homes	4,057	8.96
	<u>27,596</u>	
PROVINCIAL GOVERNMENT		
Ontario Hospitals (for mentally ill)	13,021)	29.65
Toronto Psychiatric Hospital	72)	
Attorney General's Dept. -- Gaols, etc.	89)	
Workmen's Compensation Board--	)	
Convalescent Centre	183**)	
Hydro-Electric Power Commission	60)	
	<u>13,425</u>	
FEDERAL GOVERNMENT		
Department of Veterans' Affairs	3,730	9.41
Department of National Defence	460	
Department of National Health & Welfare	<u>71</u>	
(Indian Health Service)	4,261	
Total Beds	45,282	

* This 285 comprises 103 beds in hospitals proper and 182 in summer camps.

** There are 478 beds in this centre, but only 183 of them are for treatment.

TABLE A13

PUBLIC GENERAL HOSPITALS OF ONTARIO BY SIZE GROUPING AT DECEMBER 31, 1948

(Including Red Cross Outpost Hospitals)

Number of Beds per Hospital	Number of Hospitals by Regions							Total Number of Hospitals
	Region 1	Region 2	Region 3	Region 4	Region 5	Region 6	Region 7	
Under 25	4	4	12	1	2	11	7	41
25 - 49	9	1	11	1	5	6	4	37
50 - 99	3	2	14	1	5	4	3	32
100 - 249	9	4	6	2	1	1	-	23
250 - 500	-	1	3	2	1	-	-	7
Over 500	1	1	3	-	1	-	-	6
Total	26	13	49	7	15	22	14	146

TABLE A14

DISTRIBUTION OF PUBLIC GENERAL HOSPITAL BEDS BY SIZE AND OPERATING AUTHORITY

(Based on rated bed capacity at Dec. 31, 1948)

Size of Hospital (Number of beds)	Governmental and Municipal	Non-Governmental				Total Beds	Per Cent of Whole
		Voluntary	Church	Red Cross	Others		
Under 25	29	236	79	210		554	3.64
25 to 49	246	663	309	64	80	1,362	8.95
50 to 99	312	1,051	713			2,076	13.65
100 to 249	943	1,455	1,711			4,109	27.01
250 to 500		1,084	1,305			2,389	15.70
Over 500	2,097	1,974	651			4,722	31.05
Total	3,627	6,463	4,768	274	80	15,212	100.00
Percentage of Total Beds	23.84	42.49	31.34	1.80	.53		

Ownership of Hospitals

The 146 public general hospitals fall into five major ownership or auspices groupings--municipal, voluntary association, church, Canadian Red Cross Society, and private corporation. These are set out in Table A14. Twenty-three hospitals, providing 3,627 beds, are under municipal authority, 61 are operated by voluntary associations, 37 by churches (32 of these Roman Catholic), 23 by the Red Cross, and two hospitals receiving grants under the Public Hospitals Act are privately owned.

The real significance of these figures can only be seen when they are broken down by regions and related to their respective populations. This is done in Table A16. Included in the table is a line giving the ratio of beds per 1,000 population--a common yardstick, though not one with-

out shortcomings as shall be seen later in this report.

It may be noted that Region 4, centering round Kingston, and Region 7, at the Lakehead, have the lowest total population and the highest ratio of beds per thousand. The four largest and most densely populated regions, 1, 2, 3 and 5, fall within a very narrow range of each other. Region 6, in which Sudbury is situated, has the lowest ratio of all, 2.8 beds per 1,000 population.

All the foregoing has been in terms of "rated bed capacity", that is, the number of beds officially set forth and used by the government as a basis for calculating maintenance grants. This is not to be confused with "bed complement", which is the actual count of all beds in use by patients. This discrepancy between these two totals represents the extra beds which hospitals have been obliged to

TABLE A15

DISTRIBUTION OF SEVERAL TYPES OF HOSPITAL BEDS BY HOSPITAL REGIONS IN ONTARIO (As of Dec. 31, 1948)

Regions	1	2	3	4	5	6	7	Ontario
Estimated Population 1948	732,986	599,193	1,782,004	219,064	444,087	313,714	164,578	4,255,626
Public Gen. Rated Bed Capacity (1)	2,642	2,140	6,056	992	1,686	878	818	15,212
Public Gen. Beds per 1,000	3.60	3.57	3.40	4.53	3.80	2.80	4.97	3.575
Public General Bassinettes	483	409	1,151	135	310	222	137	2,847
Isolation	22	45	162	30	145			404
Convalescent			103					103
Long Term (2)	446	161	949	54	305	31	34	1,980
Private Hospitals	119	110	365		96	119	93	902
Nursing (3) Homes, etc.	750	914	3,004	132	552	58	2	5,412

(1) Excludes beds for isolation and beds for the chronically ill.

(2) Includes 177 beds for the chronically ill in public general hospitals, but excludes 50 beds at Kitchener-Waterloo Hospital.

(3) This includes W.C.B., H.E.P.C., universities, schools, and private mental hospitals.

TABLE A16

ESTIMATED BED COMPLEMENT OF PUBLIC GENERAL HOSPITALS IN ONTARIO

(As of June 30, 1948)

Regions	1	2	3	4	5	6	7	Ontario
Bed Complement	3,344	2,170	6,049	1,047	1,868	994	882	16,294
Rated Bed Capacity	2,848	2,127	5,641	973	1,478	767	676	14,510
Overcrowding	496	43	408	74	390	227	147	1,784
Percentage over	17.1	2.0	7.2	7.7	26.4	29.6	21.6	12.29
Bassinettes Complement	680	411	1,216	149	335	198	120	3,109
Bassinettes Rated Capacity	481	408	1,151	135	308	222	137	2,842

set up in corridors and sun porches in answer to an overwhelming demand for hospital care in recent years.

At June 30, 1948, which would normally be a less active part of the hospital year (see Chart A2), there were 1,784 such extra beds reported. Many more are set up in winter and spring months when hospital utilization is at its seasonal peak. Altogether it is estimated that these extra beds made room for about 55,000 patients in 1948, and supplied, in round figures, some half million additional days of care. This constituted a special burden on the already overtaxed hospital staffs since these beds are awkwardly located with no working relationship to service rooms, sinks, etc.

Distribution of these extra beds and the extent of overcrowding are indicated in Table A16, above.

Bassinettes in Public General Hospitals

Common hospital practice is to provide one bassinette per maternity ward bed, plus one or more incubators for the care of premature infants. The rated capacity of newborn nurseries in this type of hospital at December 31, 1948, was 2,847. Distribution of these bassinettes by region is shown in Table A17 along with the estimated bassinette complement as of June 30, 1948. Estimated overcrowding then amounted to 267 bassinettes.

Of the 146 public general hospitals in Ontario, 12 were reported without incubators at the time of this survey. Sixteen hospitals had individual cubicles in their main nurseries, and several others have divided the newborn nursery into small

units in order to achieve some segregation.

There were separate isolation nurseries or rooms in 53 hospitals, and in 41 other units an available private room was used for the infant's isolation in the case of an infection.

Table A17 indicates that hospitals under 100-bed capacity have a higher proportion of total bassinette capacity than of total beds--26.24 per cent of the beds, but 40.22 per cent of all bassinettes. In 1948 these smaller hospitals cared for 37.9 per cent of all hospital births, and their share of total days of care amounted to 36.7 per cent.

Distribution of Beds by Services

Table A18 demonstrates the strong emphasis on surgical treatment in hospitals today, with 23.47 per cent of the province's 15,212 public general hospital beds assigned to it. Medicine rated next with 19.51 per cent of beds. Maternity patients were assigned 17 per cent; and paediatrics, combining medicine and surgery for patients younger than 14 or 15 years, had 8.44 per cent. The remaining 31.58 per cent were unassigned.

The apparent discrepancy between 2,587 beds assigned to maternity cases and 2,847 bassinettes is accounted for by the fact that in smaller hospitals greater flexibility is practiced and adult beds are not set aside for one particular type of patient. The majority of unassigned beds were found in small hospitals.

Assignment of beds in public general hospitals for the care of communicable diseases and for the chronically ill is covered in a later section of this report.

TABLE A17

DISTRIBUTION OF BASSINETTES BY SIZE OF HOSPITAL AND OPERATING AUTHORITY

(Based on rated capacity as of Dec. 31, 1948)

Size of Hospital (Number of beds)	Governmental and Municipal	Non-Governmental				Total Bass.	Per cent of whole
		Voluntary	Church	Red Cross	Others		
Under 25	13	84	43	65		205	7.20
25 to 49	58	191	127	16	6	398	13.98
50 to 99	78	279	185			542	19.04
100 to 249	182	305	303			790	27.75
250 to 500		106	129			235	8.25
Over 500	276	303	98			677	23.78
Total	607	1,268	885	81	6	2,847	100.00
Percentage of Total Bassinettes	21.31	44.53	31.08	2.85	.21		

TABLE A18

DISTRIBUTION OF ONTARIO'S PUBLIC GENERAL HOSPITAL BEDS BY REGION AND SERVICES

(As of Dec. 31 1948)

SERVICE	Assignment of Beds							Ontario
	Region 1	Region 2	Region 3	Region 4	Region 5	Region 6	Region 7	
Surgery	538	460	1,682	207	510	36	137	3,570
Medicine	532	565	1,252	217	170	73	159	2,968
Maternity	482	337	1,014	126	407	130	91	2,587
Paediatrics	302	124	617	57	89	41	53	1,283
Unassigned	788	654	1,491	385	510	598	378	4,804

Isolation Hospital Facilities

At the time of this survey there were 404 beds isolated for the care of acute communicable diseases in Ontario. These include 166 beds in two isolation hospitals proper (Toronto and Windsor), and 238 beds in special wards or divisions of six public general hospitals. In other communities where special facilities are not available the general hospital improvises isolation accommodation from a private room.

Convalescent Hospitals

There are two convalescent hospitals participating in provincial grants, and both these (St. John's, Newtonbrook; and Hillcrest, Toronto) are located in Region 3. In addition to these there are five convalescent summer camps which are described in detail in the section on handicapping conditions in children. As Table A20 shows, the two provide a total of 103 beds at rated capacity. They serve the metropolitan area of Toronto pri-

TABLE A19

ISOLATION HOSPITALS AND ISOLATION BEDS IN ONTARIO AS OF DECEMBER 31, 1948

Region	Location	Hospital	Beds	Patient Days
1	Windsor	Fred Adams	22*	2,282
3	Toronto	Riverdale	144*	18,096
Total beds in Isolation Hospitals			166	20,378
2	Brantford	General	28	1,627
	Hamilton	General	17	616
3	Peterborough	Civic	18	1,313
4	Belleville	General	10	2,040
	Kingston	General	20	1,563
5	Ottawa	Civic	145*	6,830
Total Isolation Beds in General Hospitals			238	13,989
Grand Total			404	34,367

*Acceptable beds.

TABLE A20

CONVALESCENT HOSPITALS AND BEDS IN ONTARIO AS OF DEC. 31, 1948

	St. John's	Hillcrest	Total
Rated bed capacity	68	35	103
Bed complement	68	42	110
Days of care in 1948	23,497	14,235	37,732
Average number of patients	64	39	
New admissions	637	246	883
Percentage occupancy	94.4	78.2	
Average length of stay	35.9 days	58.5 days*	

* Average length of stay at Hillcrest is higher because of the admission of several chronically ill patients.

TABLE A21

HOSPITAL ACCOMMODATION FOR LONG TERM ILLNESS AS OF DEC. 31, 1948

	Beds	Patients in Residence	Total Days of Care 1948
<u>A. In Hospitals for Long Term Illness</u>			
Region 1 East Windsor	242	241	88,395
1 Parkwood, London	145	150	54,628
2 St. Peter's, Hamilton	108	110	39,512
3 Our Lady of Mercy, Toronto	270	266	98,595
3 Queen Elizabeth, Toronto	516	424	141,321
3 Home for Incurable Children, Toronto	34	36	12,001
3 Runnymede, Toronto	129	129	47,182
4 St. Mary's, Kingston	54	84	24,653
5 St. Vincent, Ottawa	212	212	78,040
5 Perley Home, Ottawa	93	97	40,095
Total	1,803	1,749	624,422
<u>B. In Ward or Section of Public General Hospital</u>			
Region 1 St. Thomas Memorial	59	40	9,784
2 Brantford General	53	31	16,984
3 Kitchener-Waterloo	50	46	16,933
6 Misericordia, Haileybury	31	26	8,098
7 McKellar General, Fort William	34	32	5,508
Total	227	175	57,307
<u>C. In Public General Hospitals</u>			
Region 1		285	93,879
2		274	90,256
3		497	163,712
4		51	16,800
5		180	59,292
6		104	34,258
7		50	16,470
		1,441	474,667
Grand Total	2,030*	3,365	1,156,396**

* While 2,030 is the actual total of long-term beds in the province, elsewhere in this report the 50 beds at Kitchener-Waterloo Hospital are considered in the acute general category, in accordance with Ontario Department of Health records.

** Or 271 days of care per 1,000 of population.

marily and report few patients from outside York county. St. John's has launched a building program to increase its capacity to 170 beds by the end of 1951.

St. John's Convalescent Hospital, which is operated by the Anglican Sisters of St. John, has two members of the medical staff of each affiliating public general hospital in Toronto appointed annually to serve in rotation on its active medical staff. A consultant staff is also appointed to cover each of the major specialties.

Facilities for the Chronically Ill

Table A21 gives details of the capacity and care provided by Ontario's 10 hospitals for the chronically ill and incurable. It shows that a further five public general hospitals set aside wards or sections exclusively for these long-stay patients, and that additional numbers are occupying beds that would otherwise be used for active treatment.

This latter point is of particular concern to hospital administrators in these days of high demand for hospital care. They reported a total of 1,441 long-stay patients in beds normally available for acutely ill as of Dec. 31, 1948. This comprises roughly 10 per cent of Ontario's total acute bed capacity.

It can be assumed that a further substantial amount of long-term care was given to patients in nursing homes throughout the provinces; but since records are not required of these places by the provincial government it is impossible to estimate this with any accuracy. The necessity for a system of licensing, record-keeping and inspection of these places is pointed out in the special section on nursing homes. The Survey Committee field staff found many of them unfit for safe nursing care.

Private Hospitals

In 37 Ontario communities there are 48 hospitals providing acute general type of care under the Private Hospitals Act. In 27 of these communities, private hospitals provided the only hospital service. Their total rated bed capacity in 1948 was 861 and 195 bassinets. Bed complement reported by the hospitals themselves was 902 as of Dec. 31,

1948. Ownership of these institutions is shown in Table A22.

Four private hospitals for general care are located in Region 1, seven in Region 2, 21 in Region 3, none in Region 4, six in Region 5, five in Region 6, and five in Region 7. Eleven of the 48 have laboratory facilities (six of these small and restricted), and 17 have x-ray equipment. Many of them are located in converted residences and functional obsolescence and fire hazard make some of their beds unacceptable for planning purposes.

TABLE A22

OWNERSHIP OF LICENSED PRIVATE GENERAL HOSPITALS IN ONTARIO AS OF DEC. 31, 1948

Hospital Association or Committee	6
Church	7
Doctor	6
Registered Nurse	11
Private Citizen	10
Non-profit corporation	2
Private corporation	6
Total	48

Other Hospital Facilities

Information secured from 123 private schools, colleges and universities in Ontario showed that 65 of them provided 552 beds in their health services for short-term illness among their students. In 1948 these health services employed 85 graduate nurses and 77 practical nurses, and they reported 4,504 admissions calling for 13,249 days of care. This latter figure is incomplete because several active institutions of this type did not have complete records.

CHAPTER IV

EVALUATION OF HOSPITAL FACILITIES

Table A23 indicates that 4,619 of Ontario's 15,212 acute general hospital beds failed to measure up to generally recognized standards of acceptability at the time of this survey. Functional obsolescence and fire hazard were two major points upon which this evaluation was based. The former occurs principally in buildings erected prior to 1900 and particularly in those which have been converted from their original use to serve as hospitals. Such functional shortcomings increase the burden of nursing care and severely limit the degree of efficiency that can be achieved in every department.

Fire hazards occur frequently in these older buildings, of course, but they are not restricted to them. The survey field staff found fire hazards existing in 57 hospitals containing approximately 27 per cent of the province's beds. The cases observed have been brought to the attention of the Department of Health.

New hospitals are now able to reduce fire hazards by improved institutional design, and by using fire-resistant materials; and in recent years boards of governors responsible for many of the older hospitals have been reducing the possibility of fire wherever possible by installing extinguishers, standpipes, fire doors, etc., and by introducing fire-resistant materials and equipment. That there is still room for improvement, however, is demonstrated by reports by the survey field staff of hazardous conditions in many hospitals, which can only be attributed to gross neglect.

For example, in one city hospital with upwards of 500 beds, the fire escape serving three wards was blocked by a table and mirror, and in another ward in the maternity section a bed was placed in front of the fire escape exit. Here and in three other hospitals the fire escapes were not lighted at night.

In one of Ontario's middle-size cities the hospital basement revealed four fire doors which could not be closed because pipes had either been placed or had dropped in front of them.

In yet another hospital, it was found that an extremely hot furnace pipe was only three inches from unprotected woodwork in the basement. The danger was so obvious that the matter was reported to the authorities and the menace was eliminated.

The men's ward on the second floor of one hospital had only one means of access, through the women's ward. Should the women's ward be cut

off by fire, it would be impossible to get the male cases out.

At another hospital a balcony with rotting supports was observed. Use of this balcony as a means of escape in the event of fire would prove hazardous to both patients and rescuers.

Many hospitals in the province have laundry chutes, dumb waiters and elevator shafts which are lined with wood. They are not insulated in any way. Open wiring is in evidence in several older buildings.

A large number of hospitals in both old and modern buildings have installed fire extinguishers of a type which, according to the provincial fire marshal, are dangerous when used in an enclosed space.

In some cases carelessness is shown in the method of storing paint, oil, turpentine, etc., in hospital basements.

In some hospitals, anaesthetics of a highly volatile character are being used without adequate protection against static electricity.

In this report reference is being made to only a few of the defects which were noted by the survey staff in visiting the hospitals in the province. Others of a major nature should be quite apparent if and when a thorough official fire inspection is made of the buildings and their equipment. The Committee passed along to the Department of Health some months in advance of the issuance of this report, extracts from individual reports on more than 50 hospitals in which it was felt some immediate action should be taken to avoid danger of fire and possible loss of life.

The situation is such that constant vigilance is required. There is a responsibility on the part of the governors, the superintendents, and the staffs of hospitals and fire inspection officials to safeguard the lives of the thousands of patients entrusted to them and it should be their duty to see that every possible effort is made to avoid the holocaust of fire.

Converted residences made up most of 772 beds in buildings that were not designed originally as hospitals. This group makes up a good proportion of the facilities that have become obsolete because layout and equipment have not kept pace with modern requirements. There are several large hospital units

SUMMARY OF ACCEPTABILITY OF ACUTE GENERAL HOSPITAL FACILITIES

	Region 1	Region 2	Region 3	Region 4	Region 5	Region 6	Region 7	Total
Beds in Buildings Built Prior to 1900	202	151	598	246	198	28		1,423
Beds in Buildings Not Originally Built as Hospitals	193	45	356	78	83	17		772
Fire Hazard Beds	846	684	1,603	234	436	166	303	4,272
Acceptable Beds	1,631	1,456	4,333	627	1,319	712	515	10,593
Unacceptable Beds*	1,011	684	1,723	365	367	166	303	4,619
Rated Bed Capacity	2,642	2,140	6,056	992	1,686	878	818	15,212

*These include 4,272 beds found in conditions of notable fire hazard, plus 347 in circumstances incompatible with satisfactory hospital function.

not included here, although they are functionally out-of-date. They are sound, fire-resistive buildings that can be modernized and salvaged.

Service Facilities

The early part of this hospital inventory has been concerned with the area actually occupied by patient beds. In thoroughly up-to-date buildings this may represent as little as half the total hospital area, the remainder comprising clinical laboratory, x-ray department, operating and delivery rooms, kitchen and dining rooms, business office, workshops, laundry, power plants, etc. In public general hospitals in Ontario from 35 to 55 per cent of floor area is taken up by these supporting services. Older units are most poorly equipped with service facilities, and in many cases this is further aggravated by the addition of more beds without expansion of the areas that must serve them.

Table A24 summarizes the criticism of hospital administrators themselves regarding service facilities in their own hospitals. Each was asked to indicate in writing whether experience had shown the departments enumerated to be adequate or inadequate. All public general hospitals in the province were queried with the following results:

An even 100 of the 125 hospitals reported inadequacy or total lack of out-patient and emergency service departments. In a great number of these hospitals emergency cases have to be taken to the only operating room in the building. The use of an operating room for emergency cases is inadvisable because of the necessity of preserving there sterile facilities for the performance of surgical operations.

Lack of space is cited by a majority of hospitals as the reason for the shortcomings of their kitchen and dietary departments, maternity services, medical records, and general storage area. Of the 125 hospitals, 54 said their maternity services were handicapped by lack of labor and delivery rooms, isolation nurseries and sterilizing facilities. Of 144 hospitals, 132 said they had incubators, 12 had none; and 16 reported individual infant cubicles.

While failure to provide space for the writing and filing of medical records is reported to be a contributing cause in the failure of 106 hospitals to keep the required case histories, another important factor is the failure of some doctors to co-operate with the hospitals on this important part of their work. In 60 hospitals no medical histories were reported written, and in a further 32 hospitals the histories were not begun within the required number of hours after a patient's admission. It is one of the prescribed duties of the board of governors of public hospitals in Ontario to see to it that proper medical records are kept (Reg. 47, Public Hospital Act).

Inadequacies of residence accommodation for both graduate and student nurses are dealt with in detail in the section on nursing care. Table A23 shows that 66 of 125 hospitals are critical of the accommodation they are able to provide for their graduate nursing staff; and 26 of the 53 hospitals operating nursing schools term their student accommodation inadequate. Cases can be cited like the one where 12 student nurses are housed in one room.

Examination of each hospital by the Survey Committee's field staff, independently of the above reports, showed deficiencies in 76 clinical laboratories, 72 dietary departments, and 50 x-ray departments.

Elsewhere in this report a recommendation is made that capital grants to hospitals should be extended to include assistance in establishing vital service and training facilities. The efficiency and value of any hospital is severely limited where any one of the many reported deficiencies is found.

TABLE A24

ESTIMATES BY PUBLIC GENERAL HOSPITALS IN ONTARIO OF THE ADEQUACY AND INADEQUACY OF THEIR SERVICE FACILITIES (not including Red Cross Outposts)

Region	Number of Hospitals	Dietary		Laboratory		X-Ray		Laundry		Maternity		Medical Records	
		A.	I.	A.	I.	A.	I.	A.	I.	A.	I.	A.	I.
1	25	8	17	17	8	18	7	20	5	14	11	2	23
2	13	7	6	11	2	10	3	10	3	7	6	2	11
3	45*	28	17	23	22	33	12	25	17	25	20	10	35
4	6	1	5	4	2	5	1	4	2	2	4	2	4
5	15	6	9	7	8	10	5	12	1	10	5	-	15
6	14	8	6	7	7	13	1	8	4	8	6	3	11
7	7	6	1	3	4	6	1	7	-	5	2	-	7
Total	125	64	61	72	53	95	30	86	32	71	54	19	106

*Including Bracebridge Memorial Hospital which was a Red Cross Outpost until Dec. 31, 1948; and counting Wellesley Division of the Toronto General Hospital as a separate institution.

Region	Number of Hospitals	Nurse Accommodation				Pharmacy		Operating Rooms		Heating and Power Plant		General Storage		Outpatients & Emergency	
		A.	I.	A.	I.	A.	I.	A.	I.	A.	I.	A.	I.	A.	I.
1	25	10	10	5	4	14	11	19	6	14	11	8	17	6	19
2	13	3	10	1	3	7	4	8	5	7	6	2	11	2	11
3	45	17	22	14	12	30	16	37	8	32	13	10	35	10	35
4	6	2	4	2	2	3	3	4	2	3	3	1	5	1	5
5	15	7	8	3	2	9	6	12	3	10	5	5	10	4	11
6	14	5	7	1	1	12	2	11	3	11	3	6	8	1	13
7	7	2	5	1	2	3	4	7	-	5	2	-	7	1	6
Total	125	46	66	27	26	78	46	98	27	82	43	32	93	25	100

A - Adequate I - Inadequate

CHAPTER V

ONTARIO'S HOSPITAL EXPERIENCE IN 1948

In 1948 Ontario's 146 public general hospitals provided more than 5½ million days of care for 467,137 adults, children and newborn infants. They delivered 87,827 babies--84.31 per cent of all births occurring in the province--and 16,488 deaths occurred in hospital. The average general hospital bed in the province was used by 31 patients during the year (calculated on rated bed capacity); and the average length of stay per patient was 9.97 days.

Table A26 offers a comprehensive summary of this general hospital experience, broken down by health regions.

The table offers this information in terms of actual numbers, and from it a simple calculation shows the relationship between the percentage of Ontario's total population living in each region and the percentage of the province's total hospital admissions occurring regionally. This information is given in Table A25.

Considering only those 87,827 births which occurred in public general hospitals (and taking no account of the 4,857 in private hospitals and 2,854 in maternity homes), it can be seen that Region 3 heads the list with 87.74 per cent of its births in hospital. Region 1 reported 86.78 per cent of its total births in hospital in 1948, Region 2 reported 85.8 per cent, Region 7 - 82.47 per cent, Region 4 - 81.61 per cent, Region 5 - 79.49 per cent, and Region 6 - 70.44 per cent.

Percentage Occupancy

The average occupancy rate of all 146 public general hospitals for the year was 85.73 per cent; and this is considered by hospital authorities in the light of experience elsewhere to be unusually high. The rate for this same group of hospitals in 1938 was 67.27 per cent; and the national average across the United States in 1946 was 73 per cent.

Highest occupancy rate (94.46 per cent) in Ontario in 1948 was in hospitals between 50 and 99 beds in size; lowest (73.15 per cent) was in the smallest hospitals, those under 25-bed capacity.

Ontario's two convalescent hospitals had radically different occupancy rates--94.4 per cent in St. John's, and 78.2 per cent in Hillcrest.

With the exception of Queen Elizabeth Hospital, Toronto, all hospitals for long-term patients had occupancy rates in excess of 96 per cent. Queen Elizabeth Hospital's rate of 74.8 per cent was the result of a construction project which added new beds in 1948. Percentage for the entire group was 100.6 per cent of rated capacity.

Private hospitals offering general care showed a lower rate than public general hospitals. They averaged 76.4 per cent occupancy.

Days of Care

Analyzing the total of 4,854,346 days of care (exclusive of 673,744 newborn) in Ontario's

TABLE A25

PERCENTAGE OF PUBLIC GENERAL HOSPITAL ACTIVITY OCCURRING BY REGIONS IN 1948
(including Red Cross Outposts, omitting Canadian Mothercraft Centre)

	Region 1	Region 2	Region 3	Region 4	Region 5	Region 6	Region 7	
Percentage of Total Population	17.22	14.08	41.87	5.15	10.44	7.37	3.37	100%
Percentage of Hospital Admissions (adults & children)	18.58	13.17	38.13	6.10	11.16	7.32	5.54	100%
Percentage of Total Days of Care (adults & children)	17.15	13.28	40.05	6.19	11.90	6.27	5.16	100%

TABLE A26

PUBLIC GENERAL HOSPITAL POPULATION DATA FOR 1948
(Including Red Cross Outpost Hospitals and omitting Canadian Mothercraft Centre)

	Region 1	Region 2	Region 3	Region 4	Region 5	Region 6	Region 7	All Ontario
Estimated 1948 Population	732,986	599,193	1,782,004	219,064	444,087	313,714	164,578	4,255,626
Hospital Admissions Adults and Children	86,788	61,534	178,139	28,507	52,155	34,211	25,803	467,137
Hospital Admissions per 1,000 Population	118.40	102.69	99.97	129.81	117.44	109.05	156.78	109.77
Births in Ontario in 1948	17,928	14,638	40,522	5,736	11,978	8,905	4,462	104,169
Births per 1,000 Population	24.5	24.4	22.8	26.2	26.7	28.3	27.1	24.4
Births in Public General Hospitals	15,558	12,559	35,555	4,681	9,521	6,273	3,680	87,827
Days of Care Adults and Children (excluding infants)	832,747	644,887	1,944,129	300,339	577,799	304,598	249,847	4,854,346
Days of Care per 1,000 Population	1,136.10	1,076.26	1,090.98	1,371.01	1,301.09	970.94	1,518.10	1,140.69
Discharges from Pub. General Hospital	99,184	71,579	206,860	32,281	59,959	39,488	28,717	538,068
Deaths Occurring in Hospital	3,073	2,402	6,662	922	1,739	982	708	16,488
Average Length of Stay (in days)	9.31	9.97	10.41	10.05	10.62	8.59	9.51	9.97

This table does not include births, days of care, etc., in other than public general hospitals.

public general hospitals in 1948 by the authority under which various groups of the province's 146 hospitals operate, it can be seen that 41.9 per cent is provided by voluntary association institutions, 25.07 per cent by municipally owned hospitals, and 31.5 per cent by various church hospitals. Table A27 gives further detail by size group as well as operating authority.

During the year of this survey there were 34,367 days of care given in isolation hospitals and in the special sections or wards of general hospitals assigned to this function. There are no records or accurate estimates of the amount of isolation care given in general hospitals other than those with special facilities.

Complete data on chronically ill and incurable patients are likewise unobtainable from the records which were being kept up to the time of this survey. Long-term patients in hospitals

operated specifically for their care, in special wards or sections of general hospitals, and in active treatment beds of hospitals lacking special facilities can be counted, but not those in the province's 500 to 600 unlicensed nursing homes. As shown in Table A21 there were 3,365 patients in the former group, who received 1,156,396 days of care during the year.

Private hospitals provided 233,798 days of care to adults and children, and 36,636 to newborn infants during 1948. They reported 17,681 admissions and 4,857 births.

Correlation Between Availability and Use

As might be expected when there is such a strong demand for hospital care everywhere in Ontario, the correlation between rate of utilization and the availability of accommodation is very close. This is demonstrated in Table A28.

TABLE A27

DISTRIBUTION OF DAYS OF CARE

BY OPERATING AUTHORITY AND BY SIZE GROUPS
for year 1948

Size of Hospital	OPERATING AUTHORITY					Total Days of Care
	Municipal	Voluntary Association	Church	Red Cross	Private	
Under 25 beds	15,182	66,986	23,613	39,352		145,133
25 - 49 beds	71,841	197,446	123,195	15,439	18,888	426,809
50 - 99 beds	123,086	349,478	254,950			727,514
100-249 beds	334,784	465,331	486,559			1,286,674
250-500 beds		351,408	370,955			722,363
Over 500 beds	672,056	604,535	269,262			1,545,853
Total	1,216,949	2,035,184	1,528,534	54,791	18,888	4,854,346
Percentage of Total Days of Care	25.07	41.90	31.50	1.13	.40	100%

TABLE A28

PUBLIC GENERAL HOSPITAL BEDS AND DAYS OF CARE IN RELATION TO POPULATION

	Region 1	Region 2	Region 3	Region 4	Region 5	Region 6	Region 7
Beds per 1,000 Population	3.60	3.57	3.40	4.53	3.80	2.80	4.97
Actual Days of Care per 1,000 Population	1,123	1,044	1,091	1,348	1,302	942	1,530
Potential Days of Care per 1,000 Population	1,314	1,303	1,241	1,653	1,387	1,122	1,814

CHAPTER VI

INVENTORY OF ONTARIO'S HOSPITAL PERSONNEL

Public General Hospitals

The province's 146 public general hospitals employed a full-time staff of 20,701 as of December 31, 1948, and a further part-time group of 1,817 workers, chiefly in nursing and dietary departments. Table A29 reveals the breakdown of these totals in detail.

When the total rated bed capacity in these institutions--active treatment, isolation and long-term--is considered, this means 1.33 full-time employees per bed on a province-wide average. Adding in the 1,784 extra beds found in corridors, sun porches, etc., at the time of this survey, this ratio is reduced to 1.22 workers per bed.

It can be seen from Table A29 that there were 9,924 other workers in hospitals, supporting doctors, nurses and internes in their care of the patient. Full-time medical staff made up .3 per cent of total staff; the nursing service, with all its categories, accounted for 50.08 per cent. (As indicated in the nursing section, not all of this latter group were giving nursing care only; many nursing assistants and some graduate nurses and students were obliged to accept domestic and other non-nursing duties.) Internes add another 1.67 per cent.

In the supporting professional and technical group of the clinical laboratory, x-ray, medical social service, occupational and physiotherapy, medical records and pharmacy, there were another

TABLE A29
PERSONNEL IN PUBLIC GENERAL HOSPITALS OF ONTARIO,
INCLUDING RED CROSS OUTPOST HOSPITALS
(as of December 31, 1948)

	Full Time	Part Time	Total
Office	674	49	723
Admitting	166	7	173
Information	259	31	290
Purchasing	122	27	149
Personnel	91	9	100
Public Relations	19	3	22
Housekeeping	2,104	187	2,291
Laundry	825	139	964
Linen	283	28	311
Power	371	16	387
Buildings and Grounds	439	101	540
Subtotal	5,353	597	5,950
Nursing	10,367	494	10,861
Doctors	64	15	79
Internes	346	59	405
Dietary	2,397	472	2,869
Laboratories	480	47	527
Pharmacy	122	15	137
Physiotherapy and ()	96	13	109
Occupational Therapy)	456	51	507
Radiology	169	23	192
Medical Records	851	31	882
Others			
Subtotal	15,348	1,220	16,568
Grand Total	20,701	1,817	22,518

6.4 per cent of the total; and the dietary department comprised 11.58 per cent.

Business office, purchasing and stores, maintenance, power plant, laundry, and other personnel accounted for the remaining 29.97 per cent.

Convalescent Hospitals

Analysis of convalescent hospital staff in Ontario reflects both the difference in function from active treatment hospitals and the small size of the two units operating here. Both these hospitals are able to rely upon Toronto's public general hospitals for specialized services, and therefore find it unnecessary to employ many technical workers. Two

occupational therapists and one physiotherapist made up the technical group at the time of this survey. Nursing staff, registered and assistant, comprised 28.05 per cent of total staff. The complete breakdown is shown in Table A30. Convalescent hospital staff averages .58 per bed.

Hospitals for the Chronically Ill and Incurable

Like convalescent hospitals, these hospitals, too, depend upon nearby public general hospitals for many specialized services, at great savings to themselves in staff and equipment. The proportion of nursing staff (all categories) to total staff is higher than in convalescent units, approximately on a par with that encountered in public

TABLE A30

PERSONNEL IN ONTARIO'S TWO CONVALESCENT HOSPITALS (as of December 31, 1948)

	Full Time	Part Time	Total
Administration	10	1	11
Purchasing	0	2	2
Housekeeping)			
Laundry and Linen)	8	4	12
Power Plant)			
Building and Grounds)	6	0	6
Nurses	21	2	23
Dietary	12	13	25
Occupational Therapy	2	0	2
Physiotherapy	1	0	1
Total	60	22	82

TABLE A31

PERSONNEL IN ONTARIO'S 10 HOSPITALS FOR THE CHRONICALLY ILL AND INCURABLE (as of December 31, 1948)

	Full Time	Part Time	Total
Administration	39	3	42
Purchasing	8	0	8
Public Relations	1	0	1
Housekeeping, Laundry and Linen	174	12	186
Power Plant, Building and Grounds	61	3	64
Subtotal	283	18	301
Nursing Staff	575	64	639
Dietary	149	4	153
Medical Records	1	0	1
Pharmacy	1	1	2
Occupational Therapy	9	2	11
Physiotherapy	2	0	2
Subtotal	737	71	808
Grand Total	1,020	89	1,109

general hospitals. As it shown in the nursing section, however, the proportion of nursing assistants to graduate nurses is much higher in this group than in public general hospitals.

In the special services departments of the 10 long-term hospitals in the province there were nine full-time and part-time occupational therapists, two physiotherapists (both in one hospital), four graduate dietitians, and one registered medical librarian. Total staff averages .51 per bed in these long-term hospitals.

Licensed Private Hospitals

Ontario's 48 licensed private hospitals serving the general field employ 471 persons on a full-time basis and 29 part time. Distribution of this staff is similar to that found in the public general

hospital of comparable size, with a notable predominance of graduate nurses over other nursing personnel. Table A32 gives the complete detail.

University, College and School Infirmaries

There were, at the date of this survey, 85 registered nurses and 77 nursing assistants employed by this group to look after the 552 beds provided in special hospitals and infirmaries in educational institutions of the province.

Summary of Personnel in All Hospitals

Grand total of personnel in all types of hospital discussed in this chapter comes to 22,414 full-time, and 1,957 part-time. Table A33 sums this up.

TABLE A32

PERSONNEL IN LICENSED PRIVATE HOSPITALS IN ONTARIO (as of December 31, 1948)

	Full Time	Part Time	Total
Registered Nurses	158	13	171
Nursing Assistants (Female)	136	6	142
Nursing Assistants (Male)	26	3	29
All other staff	151	7	158
Total	471	29	500

TABLE A33

FULL AND PART-TIME PERSONNEL IN VARIOUS HOSPITAL SERVICES IN ONTARIO (as of December 31, 1948)

Type of Hospital Service	Staff		Total
	Full Time	Part Time	
Public General	20,701	1,817	22,518
Convalescent	60	22	82
Long Term	1,020	89	1,109
Private	471	29	500
Schools, Colleges and Universities	162		162
Total	22,414	1,957	24,371

CHAPTER VII

ESTIMATING ONTARIO'S HOSPITAL BED NEEDS

In attempting to determine present and future hospital bed needs of the province, it is necessary to look beyond the hospital field proper, and even beyond the field of medicine and its related sciences. Many social and economic factors, and even the force of world events, all have a bearing on the question. For administrative reasons, because of the increasingly large amounts of public money involved and because of the necessity for a firm weighing of a logical and economically sound program against the pressures of local community pride, it is desirable to have some rigidity in hospital planning. On the other hand, however, there is need for flexibility to meet the changes occurring in the health field and to face the possible effects of an economic recession, rising costs, or other eventuality.

Both patient and physician have come to depend increasingly upon hospital service in recent years. Doctors prefer working in hospitals because they provide a wider range of modern laboratory techniques and procedures than was previously available, and in hospitals they have the benefit of consultation with specialists. Patients are more inclined to seek hospitalization today because overcrowding and other circumstances in many homes combine with a shortage of suitably-trained help to make home nursing care impracticable. Another

factor is the limitation in many prepaid hospital insurance contracts providing payment of claims only when the patient is admitted to hospital.

The wide gap between then and now is pointed up in Chart A1 and in Tables A34 and A35. The line of admissions have been rising more rapidly than the line representing total days of care; and this is accounted for by the progressively shortening average length of stay--from 26.9 days in 1900 to fewer than 10 days in 1948.

Factors Tending to Increase Total Days of Care

To keep pace with an estimated population growth of 100,000 per year in this province and to provide 1,500 days of care per 1,000 population, it will be necessary to add 500 beds each year.

Available evidence suggests there will be a need for more maternity beds in public general hospitals. This is a direct result of the trend toward more hospital deliveries. In areas readily accessible to hospitals it can be expected that all deliveries will soon take place in hospital, and even in remote parts of the province the figure may pass 90 per cent in a very few years.

TABLE A34
A HALF CENTURY OF HOSPITAL EXPERIENCE IN ONTARIO
(Covering all public general hospitals and Red Cross Outposts)

	1901	1949
Number of hospitals	53	152
Number of hospital beds	4,666	15,797
Number of hospital beds per 1,000 population	2.14	3.58
Total number of births in hospital in Ontario	937	91,699
Per cent hospital births to total births in Ontario	2.07	86.04
Patients treated (adults and children)	31,992	503,504
*Patients treated per 1,000 population	14.66	114.15
Total days of care (adults and children)	745,580	5,077,460
Total infant days of care	13,400	686,796
Days of care per capita (including infants at $\frac{1}{4}$ adult per day)	.34	1.19
Average length of stay (including infants)	25 days	9.91 days
Total deaths in hospital	1,631	17,098
Per cent hospital deaths to total deaths in Ontario	5.72	39.41
Average cost per patient per day to the hospital	\$0.76	\$8.31

*Not including infants

An increasing tendency on the part of medical graduates to specialize will also increase the demand for hospital beds and equipment, since specialists require the facilities of the modern hospital in their practice. As general practitioners secure appointments to the medical staffs of hospitals there will be a further influence in this direction.

The present average stay of fewer than 10 days in public general hospitals is a result of more active diagnostic and treatment programs, but it is also directly related to the insistent demand for hospital accommodation. Hospital administration and medical staff have cooperated in encouraging discharges at the earliest possible moment. As more hospital beds are provided, this intensive pressure for discharge will lessen and a somewhat longer average length of stay may be expected. This will add to the total days of care.

Factors Tending to Decrease Total Days of Care

There were 499 patients in public general hospitals in Ontario as of Dec. 31, 1948, who had been there for more than a year (one of them for more than 19 years), and these 499 accounted for 182,634 days of care in a single year. When new and enlarged homes for the aged can be added, a number of these patients may be expected to be transferred from the hospitals.

Extension of the use of Department of Veterans' Affairs hospitals will also relieve the burden on public general hospitals by looking after many ex-service personnel.

Introduction of home-care programs by community hospitals in Ontario may lead, as it has in some cities outside the province, to more days of care at home and fewer in hospital. Another development, which would cut down the use of active treatment beds for purely diagnostic purposes, would

be that removal of hospital insurance limitations covering the insured's diagnostic expenses only after admission.

Generally speaking, an extended period of prosperity enables the population to catch up on its unfilled medical needs. This is not to say that the people of Ontario have no unfilled medical needs, but the situation is much more favourable in this regard today than it was in the years immediately following the depression of the 1930's.

Added to all these extra-medical factors are the continuing advances in medical science, which are successfully reducing the length of treatment and convalescence for many illnesses.

Method of Estimating Hospital Bed Needs

Many methods have been used in the past to estimate the demand or the need for hospital beds. Because of a lack of certain essential data on sickness in the population, however, none of these can be more than a well-informed estimate, nor can it yield more than a rough approximation of what beds may be required upon accepting certain assumptions.

After considering various of these methods, including the "bed-death ratio", the Survey Committee decided to follow the practice of simply projecting the recent pattern of hospital-bed demand into the future and relating it to the best estimates available on the province's population increase to 1954. Because of variations in the pattern of hospital use in different parts of Ontario, these estimates were developed separately for each of the seven hospital regions.

The method used here yields a result expressed in terms of the number of days of hospital care needed by each 1,000 of the population. Such a figure reflects both admission rate and length of stay in hospital, and it has the further advantage of

TABLE A35

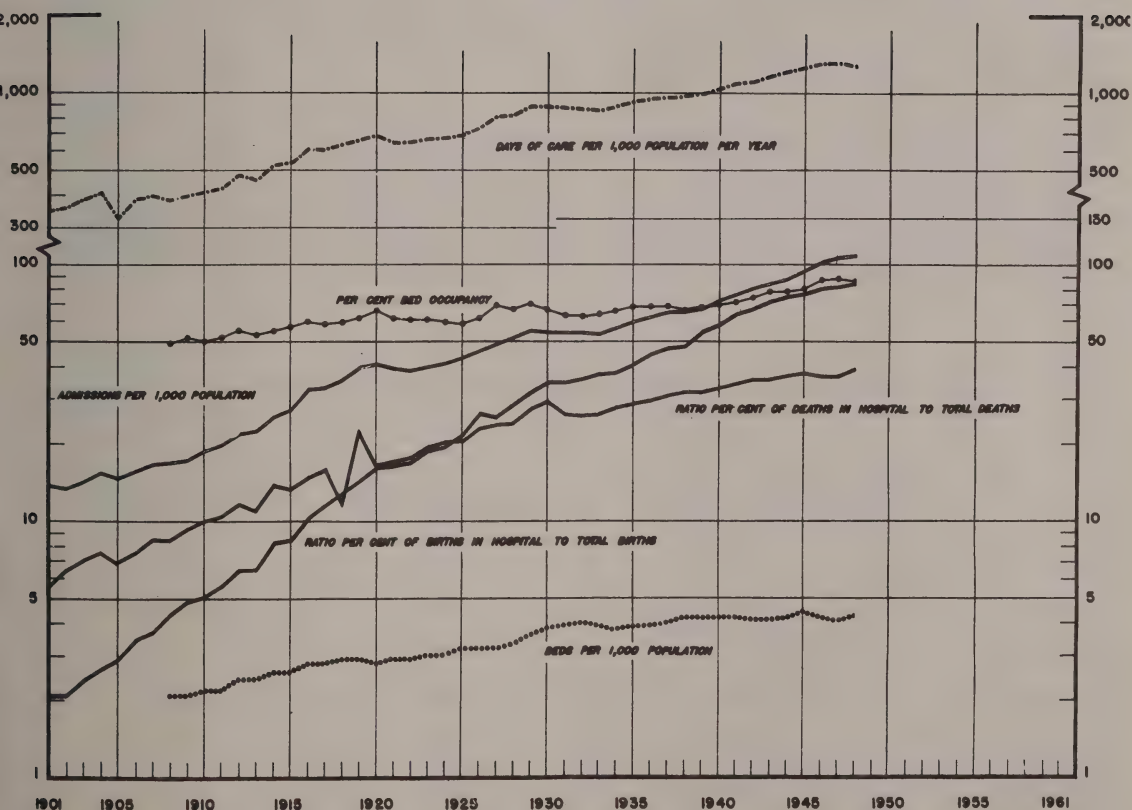
TRENDS IN HOSPITALIZATION - PUBLIC GENERAL HOSPITALS OF ONTARIO, 1901 - 1949

Factor	1901	1911	1921	1931	1941	1946	1947	1948	1949
Number of hospitals	53	71	92	140	146	145	146	149	152
Beds per 1,000 population	**	2.2	2.9	3.9	4.2	4.2	4.2	4.3	4.3
Patients treated per 1,000 population	13.5	22.4	44.7	63.8	91.9	124.5	132.1	133.7	137.1
Days of care per caput	0.35	0.42	0.64	0.88	1.08	1.31	1.31	1.30	1.33
Per cent of births in hospital	2.1	5.6	16.5	34.9	63.2	80.1	82.2	84.3	86.0
Per cent of deaths in hospital	5.5	10.5	17.0	26.6	34.0	37.0	37.0	38.9	39.4

**Not available

CHART A1

TRENDS IN HOSPITALIZATION IN ONTARIO, 1901-48



being expressed in the unit (patient-day) used in hospital accounting.

Table A35 shows how hospital records for the years 1931, 1936, 1941, 1946, 1947 and 1948 were set down and related to official population figures to establish a days-of-care-per-thousand index. This was used to draw a hospital-care trend line, which, when related to reliable population estimates for the years 1950 to 1954, revealed the estimated days-of-care-need. The total days-of-care need in each region was reduced to the number of occupied hospital beds by dividing it by 365. Accepting 75 per cent of rated bed capacity as a good average level of occupancy under normal conditions, these figures were multiplied by 4/3 to give the estimated number of beds required--25,461 for the province as a whole.

Number of Active Treatment Beds Needed

Bed needs of public general hospitals in each of the seven hospital regions are shown in Table A37, and in Table A38 a more recent net bed-need picture is shown, taking into consideration construction programs now planned or already under way. This reveals that these projects will make up 45.1 per cent of the province's total estimated needs by 1954; but the following regional breakdown is more significant than the provincial total as a guide to the location of future projects.

There was a net gain in approved bed capacity of 937 beds in 1949. The number of new beds constructed was actually larger, but because some of these replaced obsolete beds they are not added to the total available. In 1949 there were an additional 3,608 beds in varying stages of construction and a further 159 in an advanced stage of planning.

Again a larger total number of beds are being built, but some are replacing obsolete accommodation.

Elsewhere in this report it has been shown that 4,619 beds were considered unacceptable for planning purposes by the Survey Committee, either through obsolescence or because of fire hazards. When this number is added to the estimated deficiency of 5,725 in rated bed capacity, a total construction requirement of 10,344 public general hospital beds results.

Local and Area Surveys

The hospital-bed requirement of any community or area depends upon a great many factors, the chief ones being the customs of the people, the pattern of medical practice, the economy of the area, and the location of medical school facilities.

The committee recognizes that the over-all figures which have been computed may be subjected to criticism, and records its conviction that, notwithstanding any area or region "pattern estimate", before any hospital is built a comprehensive local survey should be done, and that such surveys should include a careful and critical assessment of the current use of existing facilities to determine whether or not they are being efficiently used.

A detailed distribution of beds and facilities at the community level has not been set down by the Survey Committee. When the question of building a new hospital or expanding an existing one does arise, the circumstances should be examined in detail by a competent staff that has access to all records and facts. This responsibility would be one of the most important duties of the Ontario

TABLE A36
ACTIVE TREATMENT BEDS NEEDED AND PLANNED BY REGIONS

	New Active Treatment Beds Needed by 1954	New Beds Provided by Present Plans	Percentage of Need Already in View
Region 1	1,432	588	41.06
Region 2	1,503	785	52.22
Region 3	4,890	2,065	42.33
Region 4	267	268	100.37
Region 5	1,027	409	39.82
Region 6	890	225	25.28
Region 7	420	364	86.66
Ontario Total	10,429	4,704	45.10

TABLE A37

ESTIMATED PUBLIC GENERAL HOSPITAL BED NEEDS OF HEALTH REGIONS IN ONTARIO

BY DAYS OF CARE APPROACH

Factor	Year	Region 1	Region 2	Region 3	Region 4	Region 5	Region 6	Region 7	Ontario
Days of Care per 1,000 of Population	1931	608.44	715.28	825.50	960.19	1024.67	624.41	988.99	792.72
	1936	646.37	715.49	912.77	1024.45	1018.53	707.26	96.63	852.29
	1941	798.67	796.70	970.36	1037.45	1142.22	806.65	1279.51	939.79
	1946	1163.49	979.72	1084.00	1366.07	1367.58	1049.28	1696.71	1148.15
	1947	1134.31	1012.50	1068.00	1406.38	1302.90	975.13	1561.65	1125.45
	1948	1136.10	1076.26	1090.98	1371.01	1301.09	970.94	1518.10	1140.69
Estimated Population for Years:	1950	744,761	635,684	1,872,218	219,766	453,013	332,174	174,600	4,432,216
	1951	750,719	654,755	1,919,023	220,118	457,543	341,807	179,838	4,523,803
	1952	756,725	674,398	1,966,999	220,470	462,118	351,719	185,233	4,617,662
	1953	762,779	694,630	2,016,174	220,823	466,739	361,919	190,790	4,713,854
	1954	768,881	715,469	2,066,578	221,176	471,406	372,415	196,514	4,812,439
Estimated Need of Days of Care per 1,000 of Population	1950	1,225	1,175	1,200	1,400	1,375	1,025	1,575	
	1951	1,300	1,225	1,275	1,450	1,425	1,100	1,625	
	1952	1,350	1,275	1,350	1,500	1,475	1,175	1,675	
	1953	1,400	1,325	1,400	1,550	1,525	1,250	1,700	
	1954	1,450	1,375	1,450	1,575	1,575	1,300	1,725	
Estimated Number of Occupied Beds	1950	2,499	2,047	6,155	862	1,700	933	753	14,949
	1951	2,674	2,198	6,704	874	1,787	1,031	800	16,068
	1952	2,797	2,355	7,275	906	1,860	1,133	850	17,176
	1953	2,926	2,521	7,734	937	2,004	1,239	904	18,255
	1954	3,055	2,732	8,210	944	2,035	1,326	929	19,231
Estimated Number of Beds at 75% Occupancy	1950	3,332	2,730	8,206	1,151	2,267	1,110	1,004	19,800
	1951	3,579	2,932	8,938	1,166	2,383	1,374	1,066	21,438
	1952	3,729	3,140	9,700	1,208	2,480	1,510	1,133	22,900
	1953	3,901	3,362	10,310	1,218	2,673	1,653	1,205	24,322
	1954	4,074	3,642	10,946	1,259	2,713	1,768	1,238	25,641
Net Bed Needs Acute General Hospitals & Red Cross Outposts	1950	690	590	2,150	159	581	232	186	4,588
	1951	937	792	2,882	174	697	496	248	6,226
	1952	1,087	1,000	3,644	216	794	632	315	7,688
	1953	1,259	1,222	4,254	226	987	775	420	9,143
	1954	1,432	1,503	4,890	267	1,027	890	420	10,429

TABLE A38

CONSTRUCTION PROGRAM FOR PUBLIC GENERAL HOSPITALS IN ONTARIO

(As of December 31, 1949)

Factor	Region 1	Region 2	Region 3	Region 4	Region 5	Region 6	Region 7	Ontario
Rated Bed Capacity Dec. 31, 1948	2,642	2,140	6,056	992	1,686	878	818	15,212
Net Gain by Construction completed 1949	27	34	481	142	125	15	113	937
Rated Bed Capacity Dec. 31, 1949	2,669	2,174	6,537	1,134	1,811	893	931	16,149
Under construc- tion, to be completed 1950	261	319	695	61	135	197	19	1,687
1951	64		327	65		13		469
1952		85	371		149		162	767
1953	196	298	191					685
Contemplated Construction	40	49					70	159
Total Possible Beds in View	3,230	2,925	8,121	1,260	2,095	1,103	1,182	19,916
Recommended by 1954	4,074	3,643	10,946	1,259	2,713	1,768	1,238	25,641
Remaining Need	844	718	2,825	0	618	665	56	5,725

TABLE A39

ESTIMATED NEED OF BEDS FOR THE LONG-TERM PATIENT, 1950-1954

Factor	Year	Region 1	Region 2	Region 3	Region 4	Region 5	Region 6	Region 7	Ontario
Total Capacity for Long-Term Patients	1948	446	161	999	54	305	31	34	2,030
Estimated Population	1948	732,986	599,193	1,782,004	219,064	444,087	313,714	164,714	4,255,626
Beds per 1,000	1948	.61	.27	.56	.25	.69	.10	.21	.47
Total Days of Care for Long- Term Patients	1948	246,686	146,752	479,744	41,453	177,427	42,356	21,978	1,156,396
Days of Care per 1,000	1948	336	245	269	189	400	135	134	271
Estimated Population for Years:	1950	744,761	635,684	1,872,218	219,766	453,013	332,174	174,600	4,432,216
	1951	750,719	654,755	1,919,023	220,118	457,543	341,807	179,838	4,523,803
	1952	756,725	674,398	1,966,999	220,470	462,118	351,719	185,233	4,617,662
	1953	762,779	694,630	2,016,174	220,823	466,739	361,919	190,790	4,713,854
	1954	768,881	715,469	2,066,578	221,176	471,406	372,415	196,514	4,812,439
Estimated Days of Care per 1,000	1950	400	300	300	250	450	200	200	
	1951	450	350	350	300	500	250	250	
	1952	500	400	400	350	550	300	300	
	1953	550	450	450	400	600	350	350	
	1954	600	500	500	450	650	400	400	
Estimated Number of Occupied Beds	1950	816	522	1,539	151	559	182	96	3,865
	1951	926	628	1,840	181	626	234	123	4,558
	1952	1,036	739	2,156	211	696	289	153	5,280
	1953	1,150	856	2,486	242	767	347	183	6,031
	1954	1,264	980	2,831	273	839	408	215	6,810
Estimated Number of Beds at 95% Occupancy	1950	859	549	1,620	158	588	192	107	4,073
	1951	975	661	1,937	191	660	246	129	4,799
	1952	1,091	799	2,269	222	711	304	161	5,557
	1953	1,211	901	2,617	255	808	365	194	6,351
	1954	1,331	1,032	2,980	287	883	429	226	7,168
Net Increase in Beds	1950	413	338	671	104	283	161	73	2,043
	1951	529	500	988	137	355	215	95	2,819
	1952	645	638	1,320	168	406	273	127	3,577
	1953	765	740	1,668	201	503	334	160	4,371
	1954	885	871	2,031	233	575	398	192	5,185

Hospital Commission which is recommended in this report.

Need vs. Demand for Hospital Beds

There is a difference between the need for hospital care and the true demand. The former can only be assessed by careful local enquiry; the latter is determined by the number of beds in use and the number of persons awaiting admission. Demand is conditioned by factors other than true need in a medical sense. The demand may be either greater or less than need--in the former case there can be said to be excessive hospitalization, and in the latter case there may be deficiency in hospital care.

Facilities for the Care of Long-term Illness

The long-term field of hospital care has only recently begun to be at all well defined, and for this reason records of past experience are lacking. In the absence of a dependable trend line, it has been necessary to establish as accurately as possible the volume of long-term care given in 1948, and to assume that the trend line is upward.

The total volume of long-term care given in hospitals for the chronically ill, for incurables, and in special wards and beds of public general hospitals assigned to long-term patients in 1948 has

been secured and days of care for the year were calculated on a 90 per cent occupancy basis. Table A39 shows that during the year, there were 271 days of long-term care for each 1,000 of the population of Ontario.

It must be recognized in estimating the future needs of this group that the records reveal only a fraction of the total number in the province actually in need of long-term care. By conservative estimate there is at least a number equal to the above now in official or voluntary homes for the aged, in unlicensed nursing homes, receiving home care, or in circumstances in which necessary care cannot be obtained. As facilities become available, many from these groups will find their way into proper institutions.

Table A39 shows estimates for the years 1950 to 1954, based on 1948 experience in the various regions of the province. Expansion from 2,030 long-term beds in 1948 to 7,168 in 1954 is projected and distributed by regions. New long-term beds already being added to the province's complement are shown in Table A40. These would make a total of 3,160 such beds available by 1953. Conversion of some old public general hospital beds may add a small number to this total, but present plans are expected to leave a net shortage of 2,025 long term beds.

It is only in large urban service areas with a population in excess of 100,000 that separate

TABLE A40

CONSTRUCTION PROGRAM TO PROVIDE LONG-TERM BEDS

At December 31, 1948

	Region 1	Region 2	Region 3	Region 4	Region 5	Region 6	Region 7	Ontario
Rated Bed Capacity December 31, 1948	446	161	999	54	305	31	34	2,030
Completed 1949	20			115				135
Under Construction, to be completed in 1950	118	51			30			199
" 1951			50					50
" 1952		59	47					106
" 1953	220	369	51					640
Total Possible Capacity	804	640	1,147	169	335	31	34	3,160

institutions for general long-term care would seem warranted. Where the size of the unit required falls below 100 beds, it would seem wiser to develop long-term facilities in conjunction with the public general hospital, either as a ward or section of that hospital or in an adjoining building.

In a very small hospital even a few long-term patients may reduce very materially its capacity

for service. Introduction of a small ward for long-term patients in the small hospital may make it difficult to control admitting policies and result in the whole unit becoming primarily a long-term institution. It would seem wise to limit this development in smaller communities and await the establishment of Ontario's new homes for the aged.

CHAPTER VIII

ONTARIO'S HOSPITAL PERSONNEL NEEDS

Public General Hospitals

Table A41 summarizes the inventory and estimated needs of public general hospitals in the province for professional and technical personnel, both full-time and part-time. Needs are as of the

basic survey date, Dec. 31, 1948, and they will of course grow with the demand for hospital care and the opening of new hospital beds.

TABLE A41

INVENTORY AND ESTIMATED NEEDS OF PUBLIC GENERAL HOSPITAL PERSONNEL
(as of Dec. 31, 1948)

		PRESENT STAFF		SUGGESTED STAFF		SHORTAGE
		Part Time	Full Time	Part Time	Full Time	Full Time
CLINICAL LABORATORY	Registered	10	187		256	69
	Trained	13	68			
COMBINED LABORATORY AND X-RAY TRAINING	Registered & Trained				35	35
	Trained				20	20
X-RAY	Registered		103		209	106
	Trained		79			
DIETITIANS	Univ. Trained	3	87		176	89
	College Trained	2	20			
MEDICAL RECORDS	Registered		39		128	89
	Trained		34		14	14
	Other Office Staff	71		54		
PHARMACY	Registered	2	49		91	42
	Trained		27			
PHYSIO-THERAPY	Registered	5	50		94	44
	Trained	1	13			52
COMBINED OCCUPATIONAL AND PHYSIO-THERAPY	Registered				52	52
OCCUPATIONAL THERAPY	Registered	2	10	20	36	26
	Trained		1			
SOCIAL WORKERS	Univ. Grads.		2		104	102
	Community Agency			78		
	Others					

Nursing staff needs of this group of hospitals are discussed at length in the section on nursing care.

Convalescent and Chronic Hospitals

Staff needs in convalescent hospitals and in those for the long-term treatment of the chronically ill and incurable are mainly in the field of occupational and physiotherapy. Their nursing department needs are dealt with in the section on nursing care.

A treatment program of physical medicine, with heavy accent on rehabilitation, will require a substantial increase in the numbers of physiotherapists and occupational therapists trained. Up to the time of this survey this group of hospitals had to depend largely upon public general hospitals for the training of their specialized personnel. It would seem that the facilities of long-term hospitals themselves could be utilized for such training.

Pathologists in Ontario

There were 43 certified pathologists (some with bacteriological qualifications) practising in the province as of December 31, 1948, plus two other medical men with varying amounts of special training in the field. This is 22 short of the estimated minimum need using the standard of one pathologist for every 80,000 to 100,000 population, and allowing for the continuing growth of hospitalization and diagnostic services.

Radiologists in Ontario

There were 84 certified radiologists in the province, plus five other medical men with

some special training in this field at the time of this survey. Using a standard of one radiologist for each 40,000 population and ensuring a province-wide distribution of their services, there should be 109 practising--a shortage of 25. This is for the public general hospital field only and does not include services to Ontario mental hospitals and sanatoria and other special services.

As mentioned in the introduction to this report, there is some dissatisfaction and considerable confusion over the question of remuneration to radiologists under contract to one or more hospitals in the province. A study made in 1948 by the Ontario Hospital Association disclosed the following arrangements entered into by 77 hospitals in the province:

- 20 hospitals paid their radiologist a straight salary,
- 4 paid a salary plus a percentage of radiology department gross receipts,
- 6 paid a salary plus a percentage of radiology department net receipts,
- 26 paid a straight percentage of gross receipts,
- 5 paid a straight percentage of net receipts,
- 6 paid by some unspecified percentage arrangement,
- 6 paid on a straight unit fee basis,
- 4 used the radiologist's privately owned equipment in the hospital and permitted him to bill all patients directly.

An additional 49 hospitals responding in part to the questionnaire failed to indicate even in general terms the arrangements made with their radiologists.

TABLE A42

PRESENT (Dec. 31, 1948) AND SUGGESTED DISTRIBUTION OF PATHOLOGISTS BY HEALTH REGIONS OF ONTARIO

Region	Population	Now Certified	Estimated Need	Shortage
1	732,986	8*	11	4
2	599,193	4**	7	3
3	1,782,004	24	30	6
4	219,064	3	4	1
5	444,087	5	7	2
6	313,714	0	4	4
7	164,578	0	2	2
TOTAL		43	65	22

* - One not in practice.

** - Two trained but not certified.

A further investigation by the Survey Committee field staff revealed a number of hospitals which were under contract to pay their radiologist as much as 60 per cent of the department's gross revenue, and several others paid 50 per cent of the gross receipts. In 1949 gross receipts from radiology departments of all public general hospitals in Ontario totalled \$3,485,838.27.

Several radiologists had contracts with two or three, and in one case as many as five hospitals, and received salaries and/or 30 to 50 per cent of gross receipts from each. In terms of dollars, these arrangements represented upwards of \$20,000 in the top group during the year of the survey.

An arrangement that seemed popular with some radiologists guaranteed a minimum salary of, say \$6,000 plus 50 per cent of receipts (net in some cases, gross in others) over \$10,000 or \$12,000 a year. In the case of many radiologists, this income from hospitals comprises only a portion of the specialist's total income, since his hospital duties are part-time and he is able to carry on his private practice as well.

In many parts of the province a radiologist's services were not available even on a part-time basis and x-ray plates had to be sent by mail to a larger hospital centre; while in others the local staff doctors, not certified in radiology, endeavored to take their own plates and read them.

Clinical Laboratory Technicians

There were 343 registered laboratory technicians in all health fields in Ontario at the

date of this survey. There were 187 registered technicians and 68 trained technicians assigned full-time to public general hospitals (Table A41). In smaller hospitals laboratory service was given by part-time workers from other departments. as a matter of fact the need in hospitals with fewer than 50 or 60 beds would seem to be for technicians trained in both clinical laboratory and radiography techniques. Such a combined course is available in several provinces.

To build existing laboratory services (at Dec. 31, 1948) up to strength and to anticipate a steadily increasing demand, it is estimated that 256 hospital- and university-trained and registered technicians are needed in Ontario. This reflects a shortage of 69 in public general hospitals alone.

Fourteen of the larger public general hospitals had 59 technicians in training when this survey was made, the Mountain Sanatorium at Hamilton had two; and the University of Western Ontario was offering a three-year course leading to B.Sc. degree in laboratory technology. The latter course provided practical supervised work in London general hospitals.

By December, 1950, there were 20 public general hospitals in Ontario with approval from a special committee of the Canadian Medical Association to operate schools for laboratory technologists. These 20 hospitals had facilities for accepting a possible 110 students, but at the above date they were training only 67. It is estimated by the Canadian Society of Laboratory Technologists that approximately 100 new technicians are required each year to replace those lost through marriage, and migration to other provinces and to

TABLE A43

PRESENT (Dec. 31, 1948) AND SUGGESTED DISTRIBUTION OF RADIOLOGISTS BY HEALTH REGIONS OF ONTARIO

Region	Now Certified	Estimated Need	Shortage
1	20	23	3
2	12	15	3
3	35	43	8
4	4	7	3
5	8	11	3
6	3	7	4
7	2	3	1
Total	84	109	25

the United States. (Estimates indicate a shortage of about 4,000 laboratory technicians in the U.S.A.)

Training facilities in this field were reported to be limited by shortage of laboratory space and equipment and a scarcity of qualified instructors.

Radiography Technicians

Of 196 x-ray technicians registered with the Ontario Society of Radiographers at Dec. 31, 1948, there were 103 employed by public general hospitals. These hospitals also employed a further 79 technicians who were trained but not registered.

Table A41 reveals an estimated shortage of 209 technicians in public general hospitals, plus a need for 35 combination laboratory-radiography technicians. In 20 smaller hospitals a staff member with a shorter training in radiography is needed.

Until recently radiographers were trained primarily in the radiology departments of general hospitals under a qualified radiologist as defined by the Canadian Association of Radiologists. Twenty-seven such students were preparing to write registration examinations early in 1949.

Since the date of this survey, two new training centres have been organized--a three-year B. Sc. course at the University of Western Ontario, and a two-year course under the Extension Department of the University of Toronto which would qualify students for O.S.R. registration.

Hospital Dietitians

There were 87 university graduate dietitians in public general hospitals when this survey was conducted and 20 who were trained in special college programs. Only one hospital under 50-bed capacity had a dietitian on the staff. Table A41 indicates a need for 176 dietitians.

The Universities of Toronto and Western Ontario offer courses in Home Economics which are approved by the Canadian Dietetic Association, and 41 dietetic internships are approved in four public general hospitals--21 at Toronto General; nine at Western Hospital, Toronto; five at St. Michael's, Toronto; and six at Hamilton General Hospital.

Hospital Pharmacists

Survey studies found 49 graduate pharmacists employed full time by public general hospitals in Ontario, 26 employed part time, and 29 in training. In smaller hospitals without pharmacists members of the nursing staff are assigned to work in the pharmacy dispensing routine drugs and supplies. In a few cases members of the medical staff compounded prescriptions, but in the majority of these hospitals prescriptions were sent out to a local drugstore.

Table A41 indicates a need for 91 full-time hospital pharmacists in the province, and in addition to these, part-time pharmacists should be available to hospitals with fewer than 70 beds according to their particular needs.

There were no special courses in hospital pharmacy at the time of this survey. A candidate for a hospital post qualified by serving a hospital apprenticeship after graduation from the Ontario College of Pharmacy, Toronto.

Physiotherapists

Of the 138 members of the Canadian Physiotherapists Association in Ontario, 50 were found to be attached to the staffs of public general hospitals when this survey was conducted. Table A41 estimates that the province needs 94 physiotherapists and 52 with combined occupational and physiotherapy training. The versatility of this latter group will be particularly valuable to hospitals in the 50 to 200-bed group.

The University of Toronto has recently transferred the training of physiotherapists from the Department of Extension to the Faculty of Medicine, where it is intended to combine the training of occupational and physiotherapists in a single three-year course. This was the only centre in the province for training in physiotherapy.

Occupational Therapists

Ten full-time and two part-time occupational therapists were reported on public general hospital staffs in Ontario at Dec. 31, 1948. It is estimated that 36 graduates in this work are needed by larger hospitals in the province, in addition to the 52 combined occupational-physiotherapists mentioned above. Again the University of Toronto was the only training centre in the province at the time of this study.

Medical Record Librarians

With a few notable exceptions, medical records in Ontario public general hospitals are poorly organized and inadequate, despite the fact that a provincial regulation requires their being kept on every patient admitted for treatment. In some instances this deplorable situation can be traced to a shortage of qualified record staff and the inadequacy of library facilities, but a great deal can be attributed to a lack of interest and effort on the part of the medical staff.

The Association of Medical Record Librarians lists 79 registered members in Ontario and reports 61 of these to be located in public general hospitals; but this survey yielded only 39 reported by hospitals themselves as working in the medical records department. There are another 33 trained but not registered. It is estimated that 128 are needed in the province's larger hospitals, and that some training in this important work should

be made available to office personnel in the smaller hospitals.

the Hotel Dieu, Kingston, offered the only two courses available to medical-record librarians in Ontario. Capacity of the former was eight students per year, the latter four or five.

St. Michael's Hospital, Toronto, and

CHAPTER IX

TORONTO METROPOLITAN HOSPITAL SERVICE AREA

Map A2 shows the distribution of 16 hospitals in relation to metropolitan Toronto and its surrounding municipalities. Two new public general hospitals under construction (Mount Sinai and Hospital for Sick Children) are also shown.

It is clear from this concentration of hospital facilities that Toronto is a medical centre likely to draw patients from far beyond its local boundaries. Location of the Faculty of Medicine of the University of Toronto, the Banting Institute and Connaught Medical Research Laboratories here, and the city's strategic location at the hub of highway, airline and railway systems are important factors in attracting large numbers of patients from distant parts of the province and even from outside the province. Further enhancing the city's standing as a vital medical centre is the location here of the provincial Department of Health, and the headquarters for many national and provincial health organizations, such as the Canadian Medical Association, Canadian Public Health Association, Canadian Hospital Council, Canadian Red Cross Society, Health League of Canada, Canadian Mental Health Association, Ontario Medical Association, Ontario Hospital Association, Ontario Society for Crippled Children, etc.

Flow of Patients to Toronto Hospitals

In Table A45 the Survey Committee publishes a patient origin analysis covering discharges and deaths in Toronto hospitals in 1948. This was compiled by the Survey Committee staff from reports made by each hospital, and it discloses that 87,130 patients of the 124,938 total (69.74 per cent) gave their address as Toronto, a further 24,028 (19.23 per cent) claimed residence in York county outside Toronto proper, 13,102 (10.49 per cent) came from other parts of Ontario outside York county, and the remaining 678 (.54 per cent) stated their residence as being outside the province.

It should be pointed out that inaccuracies undoubtedly exist in the distribution as between Toronto city proper and York county outside the city, because there is confusion arising from the postal address zone system. For example, a patient from East York has as his postal address "Toronto 5", and he may enter his postal address on his hospital admission card. Or Leaside, a suburb of Toronto, is in Toronto 17 so far as postal zoning goes. It may very well be, therefore, that the City of Toronto's 69.74 per cent should be somewhat smaller and York county, excluding Toronto, somewhat larger than 19.23 per cent.

This does not invalidate the information on patients from beyond the city and York County,

and these data, analysed by county and by each of the 10 public general hospitals in the metropolitan area (all are in Toronto proper except Toronto East General) yields the following Table A44

TABLE A44
RESIDENCE OF ALL YORK COUNTY
PATIENTS IN
TORONTO GENERAL HOSPITALS 1948.
(BASED ON DISCHARGES AND DEATHS, AND
INCLUDING INFANTS)

Place of Residence	Total	
	No. of Patients	Per cent
Toronto	87,130	78.384
East York Township	4,516	4.063
Scarboro Township	3,663	3.295
North York Township	2,443	2.197
York Township	3,745	3.369
King Township	306	.274
Vaughan Township	484	.435
Markham Township	547	.492
Etobicoke Township	2,045	1.840
Gwillimbury Township	70	.063
Georgina Township	58	.052
Whitechurch Township	284	.255
Forest Hill Village	503	.452
Leaside	1,131	1.017
Weston	1,087	.978
Swansea	303	.273
Mimico	982	.871
New Toronto	928	.835
Long Branch	933	.839
Total	111,158	100.00
Toronto	87,130	78.384
York County Excluding Toronto	24,028	21.616

NOTE:

This table is compiled from the reports to the provincial health department by Toronto's 10 public general hospitals, but because some residents of suburban municipalities may give their Toronto postal zone address rather than their actual municipality of residence, the Toronto total as it appears may include a number of patients from surrounding townships. For example part of East York Township is in Toronto postal zone No. 5.

TABLE A45

RESIDENCE OF ALL PATIENTS IN TORONTO PUBLIC GENERAL HOSPITALS IN 1948

(Based on discharges and deaths, and including infants)

County or District of Residence	Number of Patients	County or District of Residence	Number of Patients
Algoma	314	Northumberland	220
Brant	234	Ontario	1, 039
Bruce	156	Oxford	101
Carleton	96	Parry Sound	300
Cochrane	477	Peel	2, 092
Dufferin	282	Perth	96
Dundas	4	Peterborough	266
Durham	227	Prescott	11
Elgin	45	Prince Edward	46
Essex	112	Rainy River	14
Frontenac	49	Renfrew	61
Glengarry	8	Russell	8
Grenville	12	Simcoe	1, 070
Grey	278	Stormont	19
Haldimand	70	Sudbury	349
Haliburton	52	Thunder Bay	208
Halton	650	Temiskaming	188
Hastings	246	Victoria	216
Huron	48	Waterloo	446
Kenora	13	Welland	427
Kent	91	Wellington	387
Lambton	78	Wentworth	397
Lanark	36	York	111, 158
Leeds	37	Total Ontario	124, 260
Lennox & Addington	28	Quebec Province	159
Lincoln	393	Other Provinces	275
Manitoulin	39	United States	187
Middlesex	87	Other Countries	56
Muskoka	371	Unknown	1
Nipissing	417		
Norfolk	91	GRAND TOTAL	124, 938

County of York, excluding Toronto.....	24, 028 - 19.23 per cent of total
City of Toronto only	87, 130 - 69.74 " " " "
Province of Ontario, excluding York	13, 102 - 10.49 " " " "
Outside Province of Ontario	678 - .54 " " " "
	124, 938 100.00

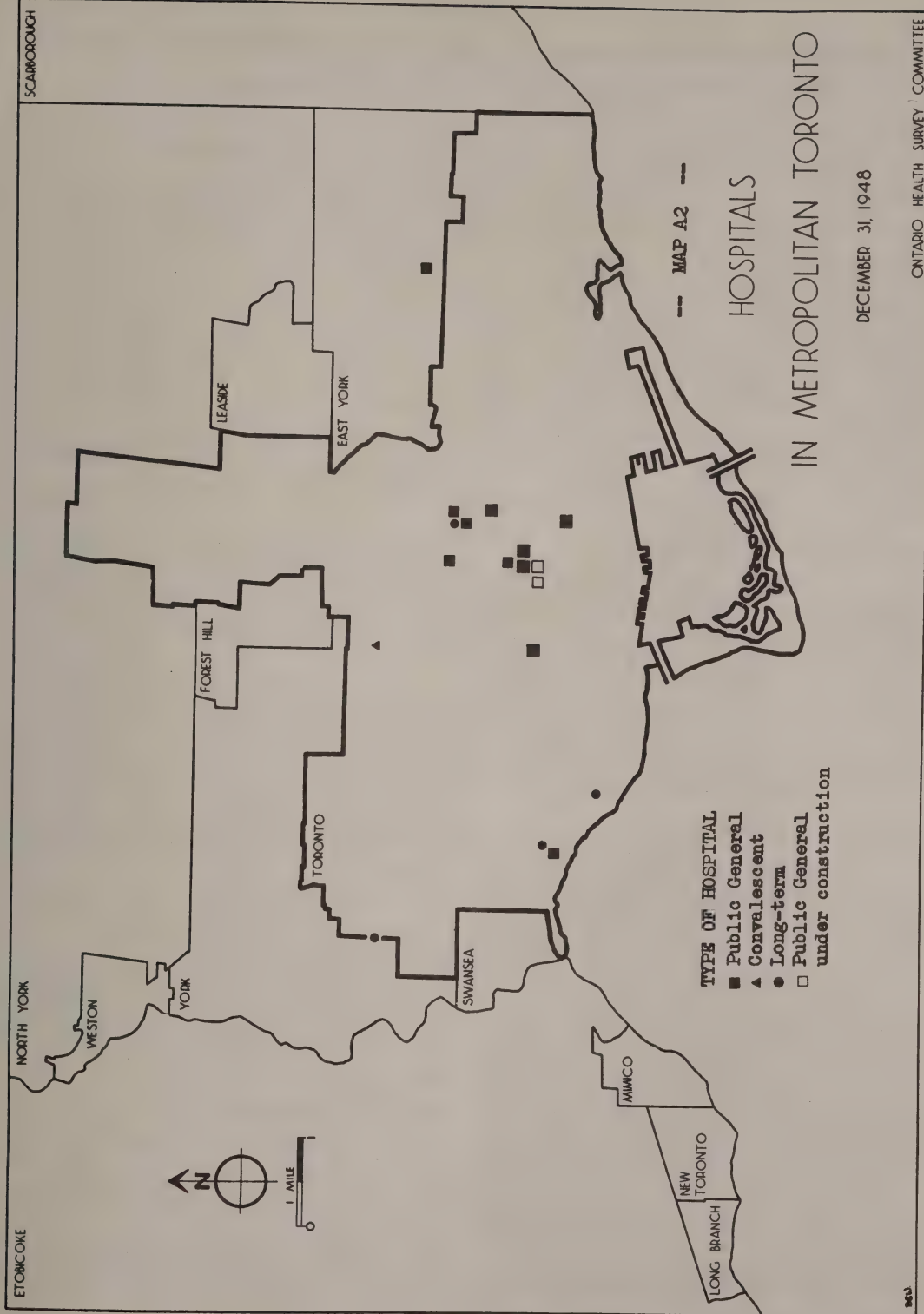


TABLE A46

PERCENTAGE OF PATIENTS FROM OUTSIDE YORK COUNTY IN EACH TORONTO PUBLIC

GENERAL HOSPITAL IN 1948 (Based on discharges and deaths and including infants)

Hospital	Total Discharges and Deaths	Discharges and Deaths from Outside York County	Percentage of Hospital's Discharges and Deaths involving non-York Patients
Toronto General	33,084	5,923	17.29
Toronto St. Michael's	17,666	1,284	7.21
Toronto St. Joseph's	11,709	1,010	8.63
Toronto Western	16,322	1,300	7.96
Toronto East General	12,796	375	2.93
Women's College	7,826	341	4.39
Salvation Army Grace	6,005	69	1.14
Hospital for Sick Children	12,047	2,441	20.26
Mount Sinai	6,585	55	.83
Lockwood Clinic	898	304	33.85
Total	124,938	13,102	10.48

Length of Stay in Toronto Hospitals

A study of average lengths of stay of all patients in public general hospitals in Toronto in 1948 reveals that patients from beyond the city and its surrounding county of York remained in hospital nearly a full week longer. The average stay of these patients was 17.07 days, as against 10.95 for city and York county patients. From this it may be deduced that patients travelling a greater distance to the province's chief medical centre did so because they were suffering from some unusually severe or complex illness.

Metropolitan Area Hospital Inventory

The Ontario Department of Health listed 18 hospitals--12 public general, two convalescent, and four for the chronically ill and incurable--as operating under the Public Hospitals Act in 1948: As of August 25, 1948, however, Wellesley Hospital became a division of Toronto General Hospital, and the two are consequently regarded as a single hospital by the Survey Committee. It is doubtful, too, whether the Canadian Mothercraft Centre, Toronto, should for survey purposes be classified as a hospital, despite the fact that it comes under the Public Hospitals Act in official records. By its own statement, its purpose is "the development of the craft of motherhood to the point where all women may understand the proper care of themselves, and their children before and after birth".

One hospital, privately operated as a limited company, was given provincial government approval under the Public Hospitals Act in 1929. In 1948 it cared for six municipal indigent patients--comprising 210 indigent patient days of care out of

a total of 9,352 days of care for all patients. Its provincial government maintenance grant in 1948 amounted to \$95.25, and by virtue of its public hospital status it was eligible for certain other advantages including exemption from federal sales tax and from certain municipal taxation.

This, then, leaves 16 hospitals in the Toronto metropolitan area, providing a total rated bed capacity of 5,006. These are listed in Table A47. All are operated by voluntary agencies with the exception of Lockwood Clinic, (private general) and Runnymede Hospital (for the chronically ill). Runnymede is managed by a voluntary board of directors, who had the building in trust from the City of Toronto. Any operating deficit is made up by the city.

Three of the 10 public general hospitals in this group have special admission policies. The Hospital for Sick Children, as its name implies, admits only children (and with the exception of St. Joseph's in West Toronto it offers the only organized paediatric service in the area). Women's College Hospital will admit only female patients; and Salvation Army Grace Hospital also limits its admission to women, and primarily to maternity cases.

Public General Hospitals

The 10 public general hospitals in the Toronto metropolitan area offer a rated capacity of 3,954 active treatment beds. They range in size from the Toronto General with 1,408 beds to the Lockwood Clinic with 48. Related to population of the city only, this would have meant 5.3 beds per 1,000 population; but the fact that the hospitals themselves report only 69.73 per cent of their

TABLE A47

SUMMARY OF TORONTO METROPOLITAN AREA HOSPITALS, BED CAPACITY AND PERCENTAGE OCCUPANCY AS OF DEC. 31, 1948

<u>Public General Hospitals</u>	Rated Bed Capacity	Per Cent Occupancy Based on Rated Adult Bed Capacity
Toronto General	1,408	86.3
Toronto East General	281	102.5
Toronto Western	566	82.9
St. Michael's	651	87.8
St. Joseph's	308	94.1
Women's College	149	81.0
Sick Children's	432	81.0
Mount Sinai	59	153.5
Salvation Army Grace	52	118.5
Lockwood Clinic	48	53.2
Total	3,954	
<u>Convalescent Hospitals</u>		
St. John's, Newtonbrook	68	94.4
Hillcrest	35	78.2
Total	103	
<u>Long-Term Hospitals</u>		
Queen Elizabeth	516	74.8
Runnymede	129	99.9
Our Lady of Mercy	270	99.8
Home for Incurable Children	34	96.4
Total	949	
Grand Total	5,006	

patients as residents of Toronto proper reduces this ratio substantially. Estimates based on the population of the actual service area of these hospitals would make it 3.66 beds per 1,000.

These hospitals, as can be seen in Chart II, were operating at capacity in 1948. Even in the months of July and December, when normally both physician and patient have less desire to use the hospital, their occupancy rate did not drop below 75 per cent of rated bed capacity.

Patients resident in York County were given 1,032,370 days of care in these hospitals in 1948, and those from outside York County an additional 229,800 days, not including infant days of care.

Convalescent Hospitals

St. John's Convalescent Hospital at Newtonbrook, just north of Toronto, and Hillcrest Convalescent Hospital in the city proper, have

been dealt with in detail in Chapter III as part of the provincial inventory, because they were listed as the only public convalescent hospitals in Ontario. They add a total of 103 beds to the Toronto metropolitan area, and 883 admissions, and provided 37,732 days of care in 1948.

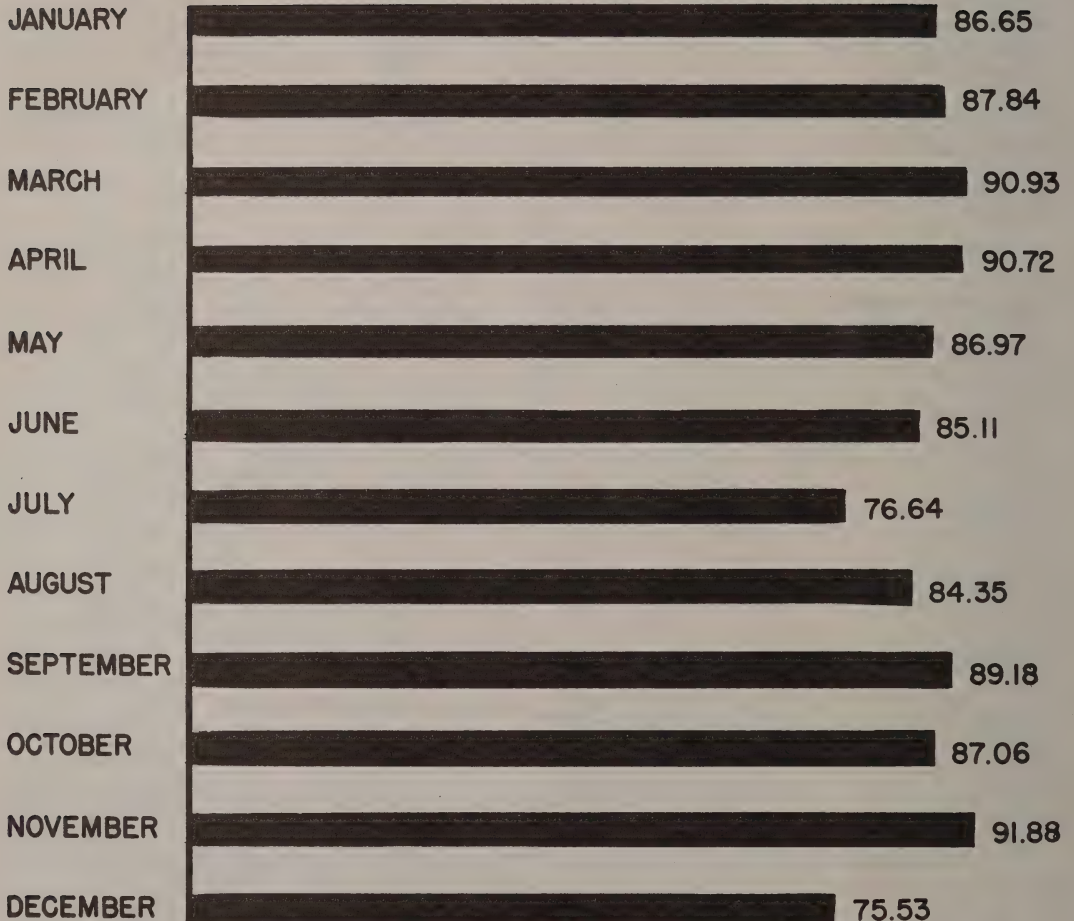
Hospitals for the Chronically Ill and Incurable

Long-term care is given in four institutions in Toronto licensed under the Public Hospitals Act. Their rated bed capacity in 1948 was 949—a ratio of .87 long-term beds per 1,000 population in the Toronto service area.

These four hospitals rendered 299,099 days of care in 1948; and the public general hospitals in the area reported giving an additional 58,801 days of care to patients classed as chronically ill in the same period. Adding these two groups, there were 357,900 days of long-term care provided in the Toronto metropolitan area in 1948. Of all the long-term patients discharged in 1948, 83 per cent were reported residing in York county.

CHART A2

PERCENTAGE OCCUPANCY BY MONTHS
IN TORONTO PUBLIC GENERAL HOSPITALS
----- FOR 1948 -----



(This represents the averaged experience of 10 Toronto public general hospitals which had a recognized bed capacity of 3,954 and a record of 124,938 discharges and deaths in 1948)

Private Hospitals

At the time of this survey there were eight hospitals in Toronto operating under the Private Hospitals Act. They offered 153 beds and 44 bassinets. Two were licensed for maternity patients only, one limits its work to the surgical care of patients with hernia, and one is exclusively for the treatment of male patients with chronic alcoholism.

Table A47 records 4,377 admissions to these eight private hospitals during 1948, and 51,235 days of care. Their occupancy rate was 91.5 per cent and the average length of stay was 11.7 days.

Other Hospital Facilities in the Toronto Area

Although this report is chiefly concerned with the foregoing categories of hospital--public general, convalescent, chronically ill and incurable, and private--the metropolitan area picture would not be complete without reference to the following other units.

As of December 31, 1948, the Department of Veterans' Affairs was operating 600 beds at Christie Street Hospital, Toronto. (D.V.A. patients have since been moved to the new 1,400-bed Sunnybrook Hospital opened just north of the city.) D.V.A. also operated Red Chevron Hospital for long-term patients and pensioners of the three armed services; and up to March 31, 1950, Lyndhurst Lodge was another D.V.A. unit for retraining veteran paraplegics. (Lyndhurst Lodge has since been converted to civilian use, making 35 beds and out-patient service available for rehabilitation of civilian paraplegics.)

For active military personnel in this area the Department of National Defence operates Chorley Park Military Hospital (100 beds), and a 10-bed sick quarters at the R.C.A.F. station in Toronto. This brought the number of beds under federal jurisdiction in the Toronto metropolitan area as of December 31, 1948, to 2,055.

Two Ontario Mental Hospitals--at New Toronto, and at 999 Queen St., West, Toronto, and the Toronto Psychiatric Hospital add 1,922 beds to the area's complement for special illness; and two sanatoria account for another 766 beds. Both these categories of hospital are studied in detail in separate sections of the Survey Committee's report.

The Department of Health of Toronto operated Riverdale Isolation Hospital with 146 beds for the care of patients with communicable diseases.

Acceptability of Facilities

Using the standards of acceptability applied right across the province (Chapter IV), public general hospitals of the Toronto area measure up better than those elsewhere.

Original sections of the Toronto General Hospital, built in 1913, leave much to be desired from a functional point of view, but the structure is fire resistant and with extensive modernization can be made acceptable. The original Hospital for Sick Children is now considered obsolete and it is being replaced by a much larger hospital, as is also Mount Sinai Hospital.

The situation in Toronto is much like that in many hospitals throughout the province. Beds and wards have increased at a faster rate than have the kitchens, laundry, maintenance, heating and other essential departments, with the result that service facilities in almost every Toronto hospital are operating beyond capacity.

Toronto hospitals carry out a heavy teaching program in medicine and its allied health fields and there is considered to be a serious limitation of the physical facilities required for education--laboratories, lecture and clinic rooms and other student accommodation. This is particularly emphasized in the light of the evident necessity for stepping up the volume of health personnel trained.

Public General Bed Needs

To provide the 229,800 days of care rendered by Toronto public general hospitals in 1948 to patients from outside York County would have required 628 beds at 100 per cent occupancy throughout the year; and at a reasonable working level of 80 per cent occupancy this would have increased to 745 beds. Subtracting this from the 3,954 active treatment beds available in Toronto hospitals in 1948, leaves 3,209 beds available to the 1,079,397 citizens in the local service area--2.96 beds per 1,000 population.

This 1,079,397 population total used in these calculations for the local service area is made up as follows:

Toronto metropolitan area	1,022,850
Vaughan Township	8,786
Markham Township	8,908
Pickering Township (one-half)	3,851
Uxbridge Township (one-half)	1,816
Peel County (one-half)	21,208
Hamilton County (one-third)	11,978
Total	1,079,397

This population in 1948 used 1,032,370 days of care in Toronto public general hospitals--956 days per 1,000 population. As can be seen by reference to Table A28, the only part of Ontario with a lower hospital utilization rate in 1948 was Region 6, centering round Sudbury, (942 days per 1,000 population).

Few patients from the Toronto service area need go elsewhere for hospital care because of the wide range of service available here. For this reason, a basic rate of 1,500 days of care per

TABLE A48

INFORMATION ON LICENSED PRIVATE HOSPITALS IN TORONTO METROPOLITAN AREA

1948

	Rated Bed Capacity		Admissions	Births	Days of Care		Average Number of Patients	Services Offered
	Beds	Bass.			Child & Adult	New-born		
Allen Private Hosp. 860 College St.	17	0	20	0	5,358	0	15	Medical, conval. rest, long-term, aged, pensioners.
Dewson Lodge P. H. 45 - 47 Dewson St.	31	0	58	0	9,914	0	28	Medical, conval., rest, long-term, aged, pensioners.
Mayfair P. H. 432 Sherbourne St.	19	12	917	477	7,179	3,339	15	Maternity
Metcalfe Nursing Home 429 Walmer Road	11	0	8	0	3,320	0	10	Conval., rest, long-term, aged
Shouldice Surgery 626 Church St.	16	0	773	0	3,324	0	10	Major surgery
Strathcona P. H. 32 Gothic Ave.	20	20	666	666	5,935	5,800	19	Maternity
St. Mary's P. H. 550 Jarvis St.	25	12	1,815	525	12,705	3,626	26	Medical, minor & major surgery, maternity.
Wood Sanatorium 43 Wellesley St.	14	0	120	0	3,500	0	10	Alcoholism only
Total	153	44	4,377	1,668	51,235	12,765	133	

TABLE A49

HOSPITAL CONSTRUCTION IN TORONTO METROPOLITAN AREA 1948-1951

Public General Hospitals	Capacity 31 Dec. 1948		Anticipated 31 Dec. 1949		Anticipated 31 Dec. 1950		Anticipated 31 Dec. 1951	
	Beds	Bass.	Beds	Bass.	Beds	Bass.	Beds.	Bass.
St. Joseph's	308	43	552	120	552	120	552	120
Weston Humber Mem.					40	18	40	18
East General	310	70	310	70	310	70	455	175
St. Michael's	651	98	651	98	805	148	805	148
Sick Children	432		432		744		744	
Western	581	87	581	87	581	87	726	147
Mount Sinai	59	25	59	25	59	25	351	86
Total	2,341	323	2,585	400	3,091	468	3,673	694
<u>Convalescent Hospitals</u>								
St. John's	68		68		68		170	
Grand Total	2,409	323	2,653	400	3,159	468	3,843	694

year per 1,000 population is considered desirable. On this basis, the estimated 1948 population (1,079,397) would require 5,545 active treatment beds, allowing for 80 per cent average occupancy.

Adding together this local need of 5,545 beds and the 745 beds required by patients from other parts of the province, and subtracting the 1948 rated bed capacity of 3,954, this leaves an estimated shortage of 2,336 active treatment beds in the Toronto metropolitan area.

These calculations are on the basis of 1948 population, and a substantial increase in these figures is anticipated in the future. One estimate, by the Civic Advisory Council Committee on Metropolitan Problems, calls for a population of 1,280,000 in the area by 1970 (an increase of 257,150 in 22 years). Another estimate put forward in the report of the Toronto and Suburban Planning Board in 1947, anticipates a total of 1,339,350 by 1971 (an increase of 316,500 in 23 years). This is for the Toronto metropolitan area only and takes no account of increases in the surrounding townships included in the local hospital service area.

Present Hospital Building Projects

Table A49 shows that Toronto East General Hospital expects to complete the addition of 145

beds in 1951; St. Joseph's opened 244 new beds in 1949; Humber Memorial Hospital will bring another 40 beds into operation. On the western fringe of this service area and consequently relevant to the bed shortage pictures, is an 80-bed extension at Peel Memorial Hospital, Brampton, and the opening of Oakville Trafalgar Memorial Hospital with 46 beds.

With the building programs under way at the time of this study, the Toronto hospital service area expected to have a grand total of 5,330 active treatment beds in operation by December 31, 1952. This is still 960 beds short of the estimated need based on 1948 hospital experience.

Chronically Ill and Incurable Bed Needs

Despite the fact that the Toronto service area's population is likely to increase at a more rapid rate than the rest of Region 3, it was deemed wise to consider the long-term bed needs of the area as a straight 60 per cent of those of the entire region as indicated in Table A38. (This 60 per cent represents the population relationship as of 1948). It was felt that the recent announcement of plans for three new homes for the aged, plus the adaptation of Lambert Lodge for long-term care, would balance

any increase in Toronto's proportion of the Region 3 population.

Taking Region 3 estimates from Table A38 the Toronto area's 60 per cent works out as follows:

Long-term bed needs by 1950-	972
" " " " " 1951-	1,162
" " " " " 1952-	1,348
" " " " " 1953-	1,570
" " " " " 1954-	1,788

It can be seen that the 1950 estimate of 972 beds has nearly been met by the rated bed capacity of the four Toronto hospitals offering long term care. Their total was 949 beds. It must be remembered, however, that 17 per cent of discharges and deaths from these four hospitals in 1948 involved patients whose residence was outside York county--only 788 were actually available to Toronto area patients.

TABLE A50
PLAN OF DEVELOPMENT FOR HOSPITAL FACILITIES IN ONTARIO

TYPE OF HOSPITAL	"A" Public General	"B" Convalescent	"C" Long-Term	"D" Welfare Institutions	Special Problems
	1 - Regional (350 - 1,000 bed, in large urban centre preferably near medical school) 2 - District (100 - 350 bed, urban and in some cases teaching) 3 - Community (20 - 100 bed, rural) 4 - Health Centre (for areas unable to support small community hospital)			1 - For bedridden 2 - Providing guidance 3 - Domiciliary	1 - Mental 2 - Tubercular 3 - Spastic 4 - Alcoholic 5 - Senile
TYPE OF PATIENT	Acutely ill or injured needing intensive medical or surgical care, and maternity cases.	Medical and surgical convalescents	Medical and surgical cases requiring a long period for rehabilitation and in need of skilled nursing care	The aged and infirm	Special problems (segregated)
FACILITIES REQUIRED	Expert medical and nursing care with all facilities for diagnosis and treatment which can be used economically in the hospital's community. All Type "A" hospitals should have facilities for infectious and observation problems.	Medical and nursing care with provision for rehabilitation. Diagnostic and operative facilities not required.	1 - Skilled medical and nursing care. 2 - Less specialized medical and nursing care.	Some medical and nursing supervision, but mainly humane domiciliary care	Expert, specially trained staff and adequate facilities
Types "B", "C" and "D" institutions should mainly be built with four-bed wards, plus a limited amount of private and semi-private accommodation.					

CHAPTER X

PLAN OF DEVELOPMENT FOR ONTARIO'S HOSPITAL FACILITIES

From the inventory of existing hospital facilities, and estimates of future needs contained in this report, it is evident that expansion of Ontario's public hospital system is necessary. As a guide to the long range planning of this expansion, the committee has prepared the following statement of fundamentals. The question of private hospitals and nursing homes is dealt with in another section of the Survey Committee's report.

Five basic types of hospital service are required (see Table A50)--

Type A - Public General

(providing expert medical and nursing care and all facilities for diagnosis and treatment of the acutely ill or injured and for maternity cases).

Type B - Convalescent

(providing medical and nursing care and facilities for rehabilitation, but not requiring elaborate diagnostic or operative facilities).

Type C - Long-Term Hospitals

(providing less specialized medical and nursing care with facilities for the rehabilitation of those patients who may be improved and domiciliary care to those unlikely to improve).

Type D - Welfare Institutions

(for three groups of aged and infirm--those who are bed-ridden, those with incapacities not requiring continuous treatment but rather guidance, and those in need of living accommodation only).

Type E - Special Hospitals

(for mental illness, tuberculosis, alcoholism, cerebral palsy, etc.).

These five types of institutions are interdependent and no one type can offer a complete service at reasonable cost to the community. Certain of their functions will overlap, but this is not wholly undesirable, since the degree of specialization in any one of them depends largely upon the size of the hospital and of the community.

To assure province-wide hospital coverage, the committee urges consideration of four classifications of public general hospital--regional centre, district centre, community, and health centre.

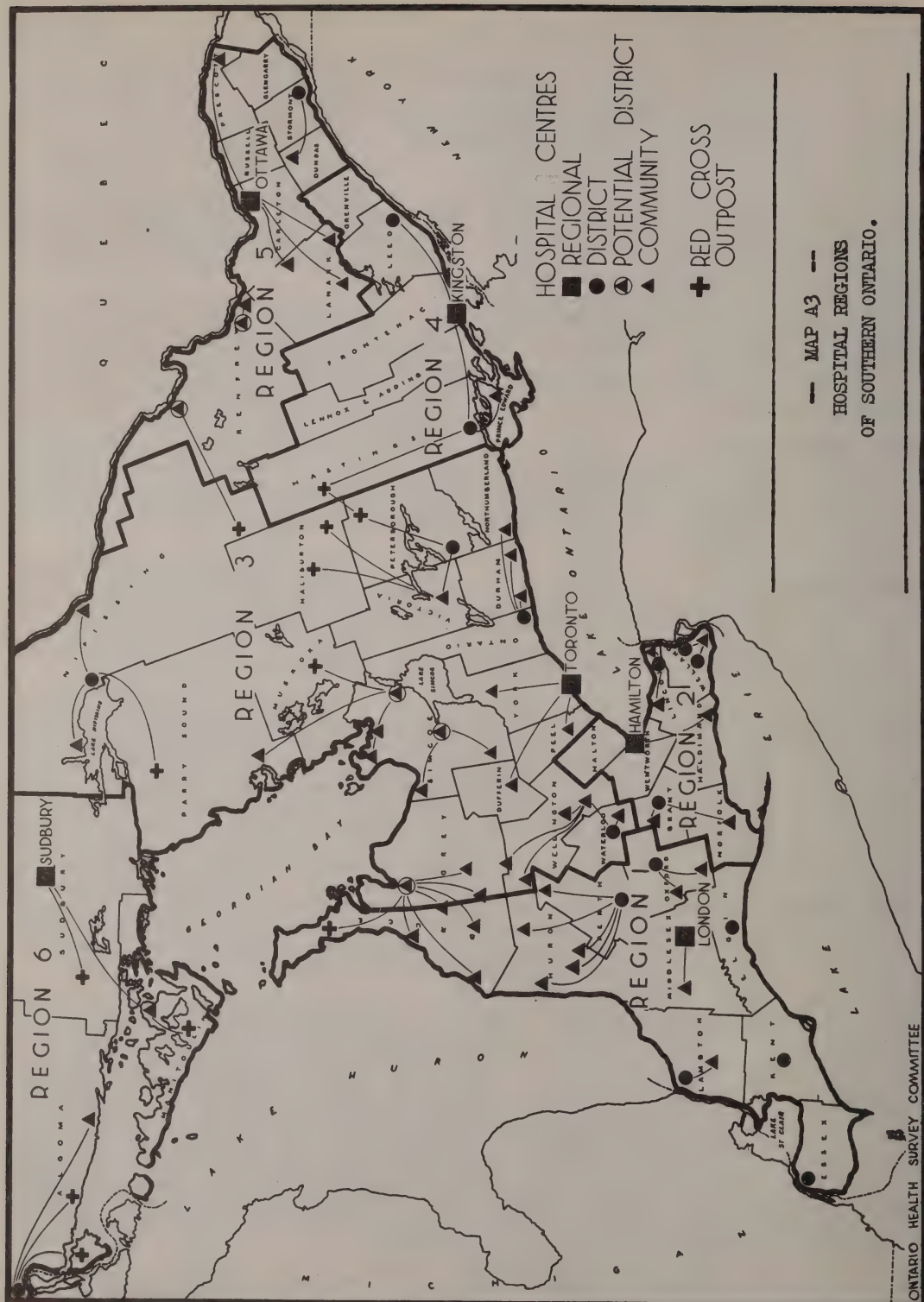
A regional centre hospital means a large unit, from 350 to 1,000 beds, situated in a large urban centre of population and associated, where possible, with a medical school. Besides supplying a full range of diagnostic and treatment service, it should provide facilities for teaching and research. A possible location of regional centre hospitals in Ontario is shown on the accompanying maps--London, Hamilton, Toronto, Kingston, Ottawa, Sudbury, and Fort William or Port Arthur. These centres should provide specialist consultation service to other hospitals in each region.

The district centre hospital is at the intermediate level, ranging in size from 100 to 350 beds, and providing all services basic to an active treatment hospital, including an available pathologist and radiologist. It would be desirable to offer training in these hospitals to internes.

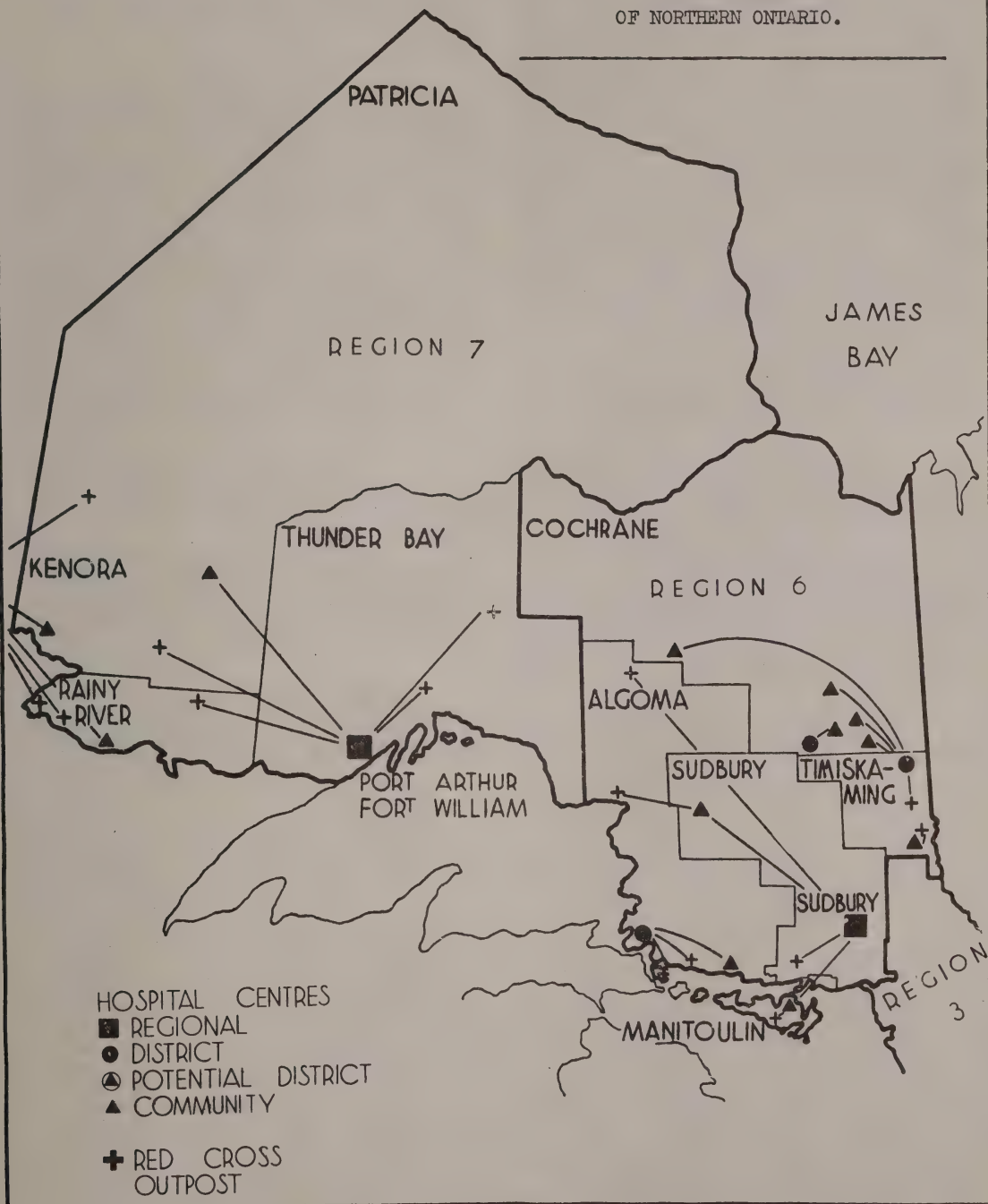
The community hospital reaches the rural population, and ranges from 100 beds down to 20. Some authorities advocate a minimum of 40 beds at this level to make certain diagnostic and treatment service more economical; but against this argument is the necessity for the widest possible distribution of at least some hospital facilities across remote parts of Ontario. Certified specialists cannot be expected in community hospitals as a general rule, and pathology and radiology may be worked out in co-operation with the nearest district or regional hospital. Clinical laboratory and x-ray facilities should, however, be available to general practitioners in the area served.

The health centre referred to in this plan might also be called a community clinic or a medical-nursing unit. It is for the areas which lack the population and resources necessary to support a small community hospital. Its in-bed care is limited to maternity, minor medical cases and emergency treatment for accident or surgical cases. Its primary function is to provide x-ray and laboratory diagnostic facilities to physicians practising in the area. The health centre might be planned to include offices for the public health department, for local physicians and possibly for a dentist.

In Ontario the Red Cross Outpost hospitals would fall into the health centre category.



-- MAP A4 --
HOSPITAL REGIONS
OF NORTHERN ONTARIO.



The committee would like to correct some popular misconceptions in connection with the out-patient departments of the public general hospital. These are not operated exclusively for the benefit of the indigent and medically indigent patient but are available to all for the treatment of minor injuries, x-ray services, and clinical laboratory services. There are two distinct types of out-patient services now in use in Ontario. One is where anyone can go with any complaint and have the necessary examinations and treatment. These are used mainly by the indigent patient and are located almost exclusively in teaching hospitals. In other hospitals the out-patient service is for all who wish to use the laboratory, x-ray and physiotherapy services of the hospital. They also operate an emergency section. In many cases this latter type of out-patient service yields a revenue greater than that from in-patients of the hospital using the same facilities. Many larger hospitals also provide follow-up clinics for tuberculosis and cancer patients and for crippled children; and some receive assistance from the Ontario Department of Health in maintaining a venereal disease clinic. Hospital records in Ontario, with few exceptions, fail to show the extent or variety of these services with their costs and revenues duly apportioned. (This is dealt with at greater length in Chapter XI).

It is chiefly in the larger cities that a separate institution to provide convalescent and rehabilitative care is warranted. In smaller centres, special wards of public general hospitals may be designated for convalescent patients. Providing special beds for this type of patient will serve to release acute beds for those badly in need of immediate active care. The economic factor also enters into this question, because it is recognized that convalescent hospital or ward services can be supplied at lower cost per patient than can services for the acutely ill.

Close co-operation between public general and long-term hospitals is also highly des-

irable, making savings possible in both staff and equipment in the long-term hospital and permitting the more economic use of active treatment beds. Transfer of patients from long-term to nearby public general hospitals for out-patient treatment or in-bed care when required should be made prompt and easy to effect. Long-term hospitals can be used advantageously, too, for the care of terminal illness such as advanced cancer, heart and kidney disease.

The number of nursing hours cannot be substantially reduced in long-term hospitals, even for the group of patients receiving what is essentially domiciliary care; but a lower proportion of graduate nurses may be used, provided there is an effective working arrangement with a nearby public general hospital.

The trend in Ontario now is to remove from the jurisdiction of health agencies the care of the aged and infirm. Since this group is made up of those with varying degrees of physical and mental infirmity, the nursing procedures involved present a real challenge to responsible welfare authorities. Close liaison with health agencies, particularly at the local level, is essential.

The long-term care of special illness such as tuberculosis and mental illness is dealt with at length in special sections of this report.

Maps A3 and A4 in this chapter illustrate a possible classification of Ontario's existing hospitals at the four levels suggested. Red Cross Outpost hospitals are regarded here as the equivalent of a community health centre.

Five hospitals shown on Map A3 as "potential district" units indicate present institutions which a Hospital Commission might consider expanding to the status of a district centre.

CHAPTER XI

OUT-PATIENT DEPARTMENTS

There is considerable confusion as to what constitutes an "organized out-patient department". In 1949 there were 20 public general hospitals in the province making returns on the Department of Health form provided "for organized public out-patient departments". This form fails to make clear whether the report should include all out-patient services or just those given through public clinics to indigent and semi-indigent patients. The result is that each hospital is left to make the return according to its own interpretation of the government's intention, and there is no uniformity in the information so reported.

Numbers of Patients and Treatments

The government form asks only for numbers of "patients treated" and numbers of "treatments or visits", and breaks these down under 20 sub-headings similar to those summarized in Table A52. There is a fundamental confusion in the column "treatments or visits" which treats the two as synonymous in spite of the fact that any patient on a single visit may receive one, two, or half a dozen separate treatments. Obviously, if one hospital reports "visits" and another "treatments" the total will be far from correct. Further, few if any hospitals

TABLE A51

OUT-PATIENT DEPARTMENTS REPORTED BY PUBLIC GENERAL HOSPITALS TO ONTARIO DEPARTMENT OF HEALTH FOR 1949

Hospital	Location	Number of Patients	Treatments or Visits
<u>Class "A"</u>			
General	Toronto	not reported	92,061
St. Michael's	Toronto	not reported	84,250
Western	Toronto	18,442	71,255
Victoria	London	9,792	24,460
Sick Children's	Toronto	not reported	74,701
General	Kingston	11,507	14,016
Hotel Dieu	Kingston	10,243	12,528
General	Ottawa	33,018	12,918
St. Joseph's	London	5,709	8,162
<u>Class "B"</u>			
General	Brockville	1,042	2,021
General	Chatham	2,005	not reported
General	Hamilton	4,216	25,865
Civic	Ottawa	14,647	35,243
General	St. Catharines	17,590	16,220
East General	Toronto	2,072	7,541
Mount Sinai	Toronto	12,067	12,067
St. Joseph's	Toronto	2,665	10,522
Salvation Army Grace	Toronto	456	3,168
Women's College	Toronto	1,378	15,878
Hotel Dieu	Windsor	377	670
Total as Reported		147,226	523,546

TABLE A52

OUT-PATIENT SERVICES REPORTED BY 20 PUBLIC GENERAL HOSPITALS
IN ONTARIO FOR 1949

Service	Number of Patients	Treatments or Visits
General Medicine	13,683	78,677
Paediatrics	2,364	4,305
Dermatology	1,703	13,343
Neuropsychiatry	753	2,255
Physiotherapy	2,438	21,504
Tuberculosis	2,550	14,787
Venerology	6,428	55,218
General Surgery	14,195	78,365
Orthopaedics	3,874	10,465
Neurology	1,108	6,622
Dentistry	2,615	9,490
Gynaecology	2,525	11,787
Ophthalmology	6,029	28,666
Otolaryngology	4,200	19,890
Urology	1,549	5,058
Pre-Natal	2,638	25,315
X-Ray	17,821	29,202
Deep X-Ray	602	3,111
Fluoroscopy	917	4,407
Electrocardiography	1,147	1,225
Sundry	58,087	99,854
Total Reported	147,226	523,546

in the province keep an individual patient record for the work of this department and they are consequently unable to determine accurately whether patients treated are new cases or those who may be returning for a second, third, or tenth time within the same year.

Such information as is available from the 20 hospitals reporting in 1949 is summarized in Table A51. This is given here with the qualifications stated above as to its accuracy.

There are certain obvious inaccuracies in Table A51 as well as notable omissions. One hospital, for example, reported to the Department of Health that there were 20,100 more patients than treatments or visits. Another reports an identical number of patients and treatments or visits--as it has done for several years previously. The three largest hospitals, in terms of reported out-patient treatments or visits fail to make any report on the number of patients. It is therefore manifestly impossible to make any calculation as to the average number of treatments or visits per patient.

Services Rendered to Out-Patients

Table A52 gives in summarized form the remainder of the information supplied by the 20 reporting hospitals on their out-patient services. It, too, is obviously lacking in uniformity and accuracy; but it may serve to indicate in general terms the scope of out-patient activity. This may be representative of the scope of such service, but neither this nor the previous table gives any clear indication of the true volume of out-patient activity. Although only 20 hospitals in the province made this return to the government, all 146 public general and Red Cross Outpost hospitals in Ontario are called upon from time to time to give diagnosis and treatment to ambulatory patients not admitted for in-bed care and not necessarily in the indigent or semi-indigent category--out-patients in the generally accepted sense of the term.

Out-Patient Department Costs and Revenue

One large city hospital supplied at the request of the Survey Committee a special analysis

TABLE A53

OUT-PATIENT COSTS AND REVENUE REPORTED BY TORONTO HOSPITALS
TO ONTARIO DEPARTMENT OF HEALTH in 1948

Hospital	Total Out-Patient Costs	Total Out-Patient Revenue	Surplus	Deficit
General	\$417, 180.52	\$323, 326.95		\$93, 853.57
St. Michael's	215, 508.32	143, 240.19		72, 268.13
East General	116, 283.19	119, 748.05	\$3, 464.86	
Women's College	63, 112.24	34, 811.58		28, 300.66
Mount Sinai	31, 868.17	13, 708.29		18, 159.88
St. Joseph's	91, 500.58	85, 989.39		5, 511.19
Western	290, 386.86	292, 500.81	2, 113.95	

of costs and revenue on its out-patient department activities for 1949. Total cost of the department for the year was stated to be \$96, 662.16, and total revenue was \$48, 314.02. Since this represents service to 67, 343 patients, the average cost per patient was \$1.43, and average revenue per patient 72 cents. Loss per visit was, therefore, 71 cents.

Out-patient revenue in the case of this hospital comprised:

\$26, 849.52 from the municipality in which the hospital was situated;
 555.00 from other municipalities sending patients to the hospital;
 2, 328.75 provincial grant to assist venereal disease clinic work;
 18, 580.75 collected in cash from out-patients.
 \$48, 314.02 total

It is reported to be common practice in this province for hospitals to include in their out-patient department financial statement, the costs and revenue resulting from diagnosis and treatment of self-pay private patients referred to the hospital for special attention, but not admitted as in-bed patients. In the case of x-ray alone, these add substantially to the profitable dollar volume of the out-patient department. In the case of one large hospital this x-ray revenue credited to the out-

patient department amounted to 59.3 per cent of the entire department's revenue for the year 1948.

Laboratory work, again done in part for private patients, comprised a further 6.1 per cent of the total; and emergency cases, also credited to the out-patient department, added another 11.8 per cent. These three important services, therefore, accounted for more than three-quarters of the entire out-patient department's dollar volume in the case of this one hospital.

Table A53, based on the generally accepted but inadequate basis of accounting, gives the overall position of out-patient departments operated by seven Toronto hospitals in 1948.

Assistance to Out-Patient Departments

Some assistance is now given hospitals in the financing of their out-patient departments--special provincial grants where venereal disease clinics are conducted, and municipal payments on a per-treatment basis made by some local governments. There has recently been some effort made by hospitals to secure further help; but the foregoing data should be sufficient to point to the necessity for more thorough and more accurate reporting before any such step can reasonably be taken.

CHAPTER XII

MORBIDITY SURVEY

Statistics on the health of any community are today largely restricted to the data derived from death certificates. The reason for using death rates is because little or no data on general sickness is available. Mortality figures, on the other hand, are provided routinely by the cause of death certified by medical practitioners, the information being made available by special departments of government.

Death rates, however, do not give a true picture of community health. The common respiratory diseases, for example, cause few deaths but much sickness and absence from work. It would be advantageous therefore, to survey all illnesses in Ontario for one year.

While it is not practical to conduct a complete survey of all illness in Ontario, it is possible to tabulate those illnesses which bring patients to hospital. While it is true that hospital morbidity is but a selected fraction of total morbidity, the hospital picture is instructive.

The Committee recognized at the outset the need for a province-wide picture of hospital morbidity. Such data were currently lacking although the information from which they might be derived is available.

In order to provide an illustration of what could be learned by a review of existing hospital returns, and to provide a pattern and some experience for any subsequent studies, a pilot study was made in Region 2. This study covered all patients who were discharged from or died in hospitals in the region during 1947.

Region 2, comprising the counties of Brant, Haldimand, Halton, Lincoln, Norfolk, Welland and Wentworth was selected for this purpose.

The following hospitals are located in Region 2, -

Cottage, Niagara-on-the-Lake
West Lincoln Memorial, Grimsby
Haldimand War Memorial, Dunnville
Willett, Paris
Norfolk General, Simcoe
Douglas Memorial, Fort Erie
Welland County General
Niagara Falls General
St. Catharines General
Brantford General
St. Joseph's General, Hamilton
Hamilton General

The purpose of this pilot study was to produce data on the types of hospitalized illness, the frequency of the various types of illness, the length of hospital stay; the sex, ages and residence of the patients, and information on the economics of illness - the proportion of patients who pay their own accounts, the proportion who are insured, the proportion who are indigent.

The Region 2 morbidity data must not be taken as reflecting the Ontario picture as a whole. They do indicate what information is available and could be derived on a province-wide basis. The Region 2 study was done with the idea of testing out the opportunities and difficulties in the analysis of the hospital morbidity data recorded on returns to the Department of Health and of learning some basic facts about hospitalization within Region 2. The figures obtained related to Region 2 only and no generalizations can be made to the province as a whole.

Methodology

During 1947, there were 70,121 discharges and deaths from these 12 hospitals in Region 2. The days of hospital care contributed by these cases totalled 646,947. In the series of cases were 58,007 adults and children representing 550,761 days of care, and 12,114 newborn infants contributing 97,186 days of care; the newborn infants are excluded from this analysis.

The survey consisted of a detailed analysis of the records of the 58,007 adults and children. The data were transferred to punch cards whence a great variety of statistical information was procured.

It was first necessary to classify each case according to the medical diagnosis or type of illness. The classification used was that of "The Manual of the International Classification of Diseases, Injuries and Causes of Death."

This is a standard classification which was adopted in 1948 to make it possible to compare morbidity rates between different nations and for different years.

Some of the data have been used elsewhere in the report. It would occupy too much space to describe all the information secured in the morbidity survey, but in this part of the report some of the more striking findings are listed, in order to illustrate the value of periodic surveys of this nature.

Morbidity Tables

The diagnosis of each case was coded according to the international list mentioned above. There were set up 18 main diagnostic sections as follows, -

- Infective and Parasitic Diseases
- Neoplasms
- Metabolic and Nutritional Diseases
- Diseases of the Blood and Blood-forming Organs
- Mental, Psychoneurotic and Personality Disorders
- Diseases of Nervous System and Sense Organs
- Diseases of Circulatory System
- Diseases of Respiratory System
- Diseases of Digestive System
- Diseases of Genito-Urinary System
- Deliveries and Complications of Pregnancy, Childbirth & Puerperium
- Diseases of Skin and Cellular Tissue
- Diseases of Bones and Organs of Movement
- Congenital Malformations
- Certain Diseases of Early Infancy
- Symptoms, Senility and Ill-defined Conditions
- Accidents, Poisonings and Violence
- Special Classifications for Special Admissions

Each of these diagnostic sections was subdivided. For example, the first diagnostic section "infective and parasitic diseases" was subdivided into six diagnostic classifications, as follows, -

- Tuberculosis of respiratory system
- Tuberculosis, other forms
- Syphilis and its sequelae
- Gonococcal infection and other venereal diseases
- Acute poliomyelitis
- Other infective and parasitic diseases

Similarly, each of the other diagnostic sections was subdivided so that altogether there were approximately 150 individual classifications.

The data which is now presented in this report is tabulated under the 18 diagnostic sections. In this way the data can be presented in more concise form than it would be possible to do by tabulating the material under the 150 individual classifications.

Table A54 shows the relationship between total discharges and deaths by age groups for the 18 diagnostic sections mentioned above.

Table A55 portrays the age incidence of the 58,007 patients whose records are surveyed, and in addition, shows the age incidence for the patients in each diagnostic section. For example, the largest number of cases (26,302) are in the age group 15 to 34 years of age. It will be noted that of these 13,877 were in the diagnostic section "deliveries, complications of pregnancy, puerper-

ium". In other words, the high morbidity incidence in the age group 15 to 35 is attributed to pregnancy and its complications. Other similar inferences may be drawn from the table. For example, by looking at the figures relating to the diagnostic section, "malignant neoplasms", information can be gained regarding the number of cancer patients in the group and their ages.

Table A56 sets out the information contained in Table A54 by percentages.

In Table A57 the information has been tabulated so as to show the percentage distribution of male discharges and deaths by age groups.

In Table A59 there is a similar calculation for female patients. This table confirms the deduction previously made that the high incidence of morbidity in the age group 15 to 34 is attributable to pregnancy and its complication inasmuch as 88.04 per cent of the cases in this age group fall into this diagnostic section.

The next subject is the length of stay in hospital. This is shown in Table A61. Of the several inferences which may be drawn from this table, one may be selected in passing. It will be noted that out of the total 58,007 cases, only 356 stayed in hospital three months and over. A large proportion, 34,001 were in hospital one to seven days and 15,444 were in hospital eight to 13 days.

Having in mind that the number of cases surveyed was large enough to serve as a cross-section of the entire population of Ontario, it will be seen that the information contained in these tables is of fundamental value in hospital planning.

Additional information relating to the duration of stay in hospital is contained in Table A62. In this table the percentage of patients remaining in hospital for any given length of time can be readily seen. The same information is also shown by age groups.

Economics

From the information collected in the survey it was possible to make various tabulations regarding the various sources of payment of the hospital costs. There were 16 various sources of payment. One of the tabulations is set out in Table A63 under the heading "Cases". In it can be seen the total number of patients in each of the 16 methods of payment and the corresponding percentages.

The next column under the heading "Days" contains similar information expressed in terms of the days of hospitalization for each method of payment.

The last column shows the average length of hospital stay for the patients in each method of payment.

This table permits an accurate comparison between the various methods of payment as to the volume of cases, the number of days of hospital care, and the average length of stay. For example, it will be seen that 19.02 per cent of the cases were paid for by the Blue Cross Plan; that this group used 16.96 per cent of the days of care; and the patients remained in hospital an average of 8.47 days. This group might be compared with the municipal indigent group who comprise 7.66 per cent of the cases; use 18.77 per cent of the days of care; and remained in hospital an average of 23.27 days. Among other things, this comparison illustrates how the control measures inherent in the Blue Cross Plan tend to reduce the hospitalization of its members. It also illustrates the fallacy of using the cost figures of hospitalization plans as a basis for computing the cost of an overall provincial or national hospitalization plan.

Table A64 contains in some detail the relationship between the method of payment and length of stay in hospital.

Residence of Patients

An accurate picture of the residence of patients is essential for good hospital planning. For example, in determining whether additional beds are needed for existing hospitals it is important to know the area served by a hospital, or in other words, from whence its patients come.

The manner in which accurate inform-

ation of this sort was readily secured in the present survey is shown in Table A65.

In this table it is possible to select any one of the hospitals in Region 2 and to ascertain at a glance the proportion of patients who reside in the same municipality in which the hospital is located; the proportion residing in the counties apart from the municipality; the proportion residing in other counties in Ontario; the proportion from unorganized districts; and the proportion residing outside Ontario.

For example, in the Hamilton General Hospital in the year 1947, there were 20,375 cases requiring 228,717 days of hospitalization. Of this number 15,851 gave a Hamilton address, 2,198 resided in the county of Wentworth apart from Hamilton; 2,247 resided in other counties in Ontario; there were four cases from unorganized districts in Ontario; and 74 cases from outside Ontario. The days of hospitalization required for each of these groups is also shown.

The foregoing is sufficient to illustrate the extent of the morbidity survey and the nature of the information which was compiled. It is to be noted that the survey produced a great volume of factual information which has been tabulated for future reference but which is too voluminous for reproduction in this report. This additional information has been transmitted to the Ontario Minister of Health with the report.

TABLE A54

TOTAL DISCHARGES AND DEATHS BY AGE GROUP FOR SELECTED DIAGNOSTIC SECTIONS

(Based on 58,007 discharges and deaths in 1947, Region 2, Morbidity Survey)

DIAGNOSTIC SECTION	AGE GROUP IN YEARS						TOTAL
	1-14	15-34	35-54	55-74	75 & Over	N. S.	
CASES							
Infective & Parasitic Diseases	256	362	126	77	20	3	844
Neoplasms*	91	542	1,115	748	149	6	2,651
(Malignant Neoplasms	21	71	397	584	139	4	1,216)
(Benign Neoplasms	61	443	672	134	5	2	1,317)
Allergic, Endocrine, Etc.	112	219	405	441	56	3	1,236
Dis. of Blood & Blood-forming Org.	31	74	63	65	22	-	255
Mental, Psychoneurotic, Etc.	15	194	298	127	11	5	650
Dis. of Nervous Sys. & Sense Org.	398	280	296	461	173	11	1,619
Diseases of Circulatory System	82	398	1,012	1,222	404	24	3,142
Diseases of Respiratory System	5,907	2,711	1,175	668	161	38	10,660
Diseases of Digestive System	1,162	2,916	1,955	1,127	140	19	7,319
Dis. of Genito-Urinary System	263	1,318	1,190	672	115	6	3,564
Deliv. Complic. Preg. Puerperium	16	13,877	1,829	10	5	26	15,763
Dis. of Skin & Cellular Tissue	334	673	382	197	35	7	1,628
Dis. of Bone & Organs of Movement	103	239	311	167	30	7	857
Congenital Malformations	59	32	16	13	--	-	120
Certain Diseases of Early Infancy	193	7	2	-	1	-	203
Symp. Senility & Ill-defined Cond.	281	539	526	303	81	14	1,744
Spec. Class. for Spec. Admissions	62	183	238	59	2	7	551
Accidents, Poisoning & Violence	849	1,606	1,207	887	233	18	4,800
Not Stated	58	132	163	44	4	-	401
TOTAL	10,272	26,302	12,309	7,288	1,642	194	58,007
DEATHS							
Infective & Parasitic Disease	8	8	5	9	2	3	35
Neoplasms*	3	13	76	158	53	2	305
(Malignant Neoplasms	3	11	72	146	52	2	286)
(Benign Neoplasms	-	2	2	8	-	-	12)
Allergic, Endocrine, Etc.	-	2	12	34	8	-	56
Dis. of Blood & Blood-forming Org.	2	-	2	7	2	-	13
Mental, Psychoneurotic, Etc.	1	-	2	1	-	2	6
Dis. of Nervous Sys. & Sense Org.	4	9	28	106	68	9	224
Diseases of Circulatory System	2	10	95	329	182	10	628
Diseases of Respiratory System	16	8	21	71	43	27	186
Diseases of Digestive System	4	9	34	64	11	8	130
Diseases of Genito-Urinary System	1	10	12	26	17	1	67
Deliv. Complic. Preg. Puerperium	-	6	3	-	-	-	9
Diseases of Skin & Cellular Tissue	2	1	3	2	2	1	11
Dis. of Bone & Org. of Movement	-	-	-	2	1	1	4
Congenital Malformations	7	1	1	2	-	-	11
Certain Diseases of Early Infancy	5	-	-	-	-	-	5
Symp. Senility & Ill-defined Cond.	11	1	7	20	7	3	49
Accidents, Poisoning & Violence	19	15	20	33	33	9	129
Spec. Class. for Spec. Admissions	-	-	-	-	-	-	-
Not Stated	1	1	-	4	-	-	6
TOTAL	86	94	321	868	429	76	1,874

*This includes 118 cases and 7 deaths involving unspecified neoplasms.

TABLE A55

DAYS OF HOSPITALIZATION IN SELECTED AGE GROUPS FOR SELECTED DIAGNOSTIC SECTIONS
(Based on morbidity survey of 58,007 discharges and deaths from Region 2 hospitals, 1947)

DIAGNOSTIC SECTION	AGE GROUP IN YEARS						TOTAL
	1-14	15-34	35-54	55-74	75 & Over	N. S.	
CASES							
Infective & Parasitic Diseases	256	362	126	77	20	3	844
Neoplasms*	91	542	1, 115	748	149	6	2, 651
(Malignant Neoplasms	21	71	397	584	139	4	1, 216)
(Benign Neoplasms	61	443	672	134	5	2	1, 317)
Allergic, Endocrine, Etc.	112	219	405	441	56	3	1, 236
Dis. of Blood & Blood-forming Org.	31	74	63	65	22	-	255
Mental, Psychoneurotic, Etc.	15	194	298	127	11	5	650
Dis. of Nervous Sys. & Sense Org.	398	280	296	461	173	11	1, 619
Diseases of Circulatory System	82	398	1, 012	1, 222	404	24	3, 142
Diseases of Respiratory System	5, 907	2, 711	1, 175	668	161	38	10, 660
Diseases of Digestive System	1, 162	2, 916	1, 955	1, 127	140	19	7, 319
Dis. of Genito-Urinary System	263	1, 318	1, 190	672	115	6	3, 564
Deliv. Complic. Preg. Puerperium	16	13, 877	1, 829	10	5	26	15, 763
Dis. of Skin & Cellular Tissue	334	673	382	197	35	7	1, 628
Dis. of Bone & Organs of Movement	103	239	311	167	30	7	857
Congenital Malformations	59	32	16	13	-	-	120
Certain Diseases of Early Infancy	193	7	2	-	1	-	203
Symp. Senility & Ill-defined Cond.	281	539	526	303	81	14	1, 744
Accidents, Poisoning & Violence	849	1, 606	1, 207	887	233	18	4, 800
Spec. Class. for Spec. Admissions	62	183	238	59	2	7	551
Not Stated	58	132	163	44	4	-	401
TOTAL	10, 272	26, 302	12, 309	7, 288	1, 642	194	58, 007
DAYS OF CARE							
Infective & Parasitic Diseases	4, 663	4, 054	1, 585	1, 286	701	93	12, 382
Neoplasms*	397	5, 553	16, 468	15, 743	4, 062	99	42, 322
(Malignant Neoplasms	151	1, 526	8, 370	13, 463	3, 850	71	27, 431)
(Benign Neoplasms	223	3, 876	7, 755	1, 483	52	28	13, 417)
Allergic, Endocrine, Etc.	994	2, 027	5, 705	7, 769	1, 992	54	18, 541
Dis. of Blood and Blood-forming Org.	339	428	926	1, 258	608	-	3, 559
Mental, Psychoneurotic, Etc.	206	1, 411	2, 808	2, 210	391	6	7, 032
Dis. of Nervous Sys. & Sense Org.	2, 878	2, 298	5, 289	11, 242	2, 903	892	25, 502
Diseases of Circulatory System	1, 023	3, 930	12, 958	26, 455	11, 848	490	56, 704
Diseases of Respiratory System	14, 913	10, 141	8, 689	8, 189	2, 834	292	45, 058
Diseases of Digestive System	8, 297	23, 787	22, 991	18, 251	2, 527	200	76, 053
Diseases of Genito-Urinary System	1, 608	10, 644	13, 269	12, 096	2, 822	42	40, 481
Deliv. Complic. Preg. Puerperium	94	98, 209	13, 692	68	172	174	112, 409
Diseases of Skin & Cellular Tissue	2, 533	3, 854	3, 169	2, 705	584	44	12, 889
Dis. of Bone & Org. of Movement	1, 476	3, 015	3, 919	4, 605	1, 423	172	14, 610
Congenital Malformations	660	284	132	149	-	-	1, 225
Certain Diseases of Early Infancy	2, 892	54	12	-	50	-	3, 008
Symp. Senility & Ill-defined Cond.	1, 886	3, 081	4, 044	3, 072	2, 209	43	14, 135
Accidents, Poisoning & Violence	7, 171	12, 795	14, 353	15, 148	8, 134	485	58, 086
Spec. Class. for Spec. Admissions	611	927	1, 027	377	84	29	3, 055
Not Stated	690	1, 096	1, 066	748	110	-	3, 710
TOTAL	53, 131	187, 588	132, 102	131, 371	43, 454	3, 115	550, 761

*Total neoplasms includes 118 cases (1,474 days of care) involving unspecified neoplasms

TABLE A56

% DISTRIBUTION OF TOTAL DISCHARGES & DEATHS BY AGE FOR SELECTED DIAGNOSTIC SECTIONS

(Based on morbidity survey of 58,007 discharges and deaths from Region 2 hospitals in 1947)

DIAGNOSTIC SECTION	AGE GROUP IN YEARS						TOTAL NUMBER
	1-14	15-34	35-54	55-74	75 & Over	N.S.	
CASES							
Infective & Parasitic Diseases	30.33	42.89	14.93	9.12	2.37	0.36	844
Neoplasms*	3.43	20.45	42.06	28.21	5.62	0.23	2,651
(Malignant Neoplasms)	1.73	5.84	32.65	48.03	11.42	0.33	1,216)
(Benign Neoplasms)	4.63	33.64	51.03	10.17	0.38	0.15	1,317)
Allergic, Endocrine, Etc.	9.06	17.72	32.77	35.68	4.53	0.24	1,236
Dis. of Blood and Blood-forming Org.	12.16	29.02	24.70	25.49	8.63	-	255
Mental, Psychoneurotic, Etc.	2.31	29.85	45.85	19.54	1.68	0.77	650
Dis. of Nervous Sys. & Sense Org.	24.58	17.29	18.28	28.48	10.69	0.68	1,619
Diseases of Circulatory System	2.61	12.67	32.21	38.89	12.86	0.76	3,142
Diseases of Respiratory System	55.41	25.43	11.02	6.27	1.51	0.36	10,660
Diseases of Digestive System	15.88	39.84	26.71	15.40	1.91	0.26	7,319
Diseases of Genito-Urinary System	7.38	36.98	33.39	18.85	3.23	0.17	3,564
Deliv. Complic. Preg. Puerperium	0.10	88.04	11.60	0.06	0.03	0.17	15,763
Dis. of Skin & Cellular Tissue	20.52	41.34	23.46	12.10	2.15	0.43	1,628
Dis. of Bone & Organs of Movement	12.02	27.89	36.29	19.49	3.50	0.81	857
Congenital Malformations	49.17	26.67	13.33	10.83	-	-	120
Certain Diseases of Early Infancy	95.07	3.45	0.99	-	0.49	-	203
Symp. Senility & Ill-defined Cond.	16.11	30.91	30.16	17.37	4.65	0.80	1,744
Accidents, Poisoning & Violence	17.69	33.46	25.15	18.48	4.85	0.37	4,800
Spec. Class. for Spec. Admissions	11.25	33.21	43.20	10.71	0.36	1.27	551
Not Stated	14.46	32.92	40.65	10.97	1.00	-	401
TOTAL	17.71	45.34	21.22	12.56	2.83	0.34	58,007
DEATHS							
Infective & Parasitic Diseases	22.86	22.86	14.29	25.71	5.71	8.57	35
Neoplasms*	0.98	4.26	24.92	51.80	17.38	0.66	305
(Malignant Neoplasms)	1.05	3.85	25.17	51.05	18.18	0.70	286)
(Benign Neoplasms)	-	16.67	16.67	66.66	-	-	12)
Allergic, Endocrine, Etc.	-	3.57	21.43	60.71	14.29	-	56
Dis. of Blood & Blood-forming Org.	15.38	-	15.38	53.85	15.39	-	13
Mental, Psychoneurotic, Etc.	16.67	-	33.33	16.67	-	33.33	6
Dis. of Nervous Sys. & Sense Org.	1.78	4.02	12.50	47.32	30.36	4.02	224
Diseases of Circulatory System	0.32	1.59	15.13	52.39	28.98	1.59	628
Diseases of Respiratory System	8.60	4.30	11.29	38.17	23.12	14.52	186
Diseases of Digestive System	3.08	6.92	26.15	49.23	8.46	6.16	130
Diseases of Genito-Urinary System	1.49	14.93	17.91	38.81	25.37	1.49	67
Deliv. Complic. Preg. Puerperium	-	66.67	33.33	-	-	-	9
Dis. of Skin & Cellular Tissue	18.18	9.09	27.28	16.18	18.18	9.09	11
Dis. of Bone & Organs of Movement	-	-	-	50.00	25.00	25.00	4
Congenital Malformations	63.64	9.09	9.09	18.18	-	-	11
Certain Diseases of Early Infancy	100.00	-	-	-	-	-	5
Symp. Senility & Ill-defined Cond.	22.45	2.04	14.29	40.81	14.29	6.12	49
Accidents, Poisoning & Violence	14.73	11.63	15.50	25.58	25.58	6.98	129
Spec. Class. for Spec. Admissions	-	-	-	-	-	-	-
Not Stated	16.66	16.67	-	66.67	-	-	6
TOTAL	4.59	5.02	17.13	46.32	22.89	4.05	1,874

*Total neoplasms includes 118 cases and 7 deaths unclassified as malignant or benign.

TABLE A57

% DISTRIBUTION OF MALE DISCHARGES & DEATHS BY AGE FOR SELECTED DIAGNOSTIC SECTIONS

(Based on morbidity survey of 58,007 discharges and deaths from Region 2 hospitals in 1947)

DIAGNOSTIC SECTION	AGE GROUP IN YEARS						TOTAL NUMBER
	1-14	15-34	35-54	55-74	75 & Over	N.S.	
CASES							
Infective & Parasitic Diseases	30.73	40.60	16.51	10.09	1.89	0.23	436
Neoplasms*	4.90	11.47	26.29	45.87	11.05	0.42	715
(Malignant Neoplasms	1.12	3.56	25.47	54.87	14.42	.56	534)
(Benign Neoplasms	15.56	41.48	25.18	17.78	-	-	135)
Allergic, Endocrine, Etc.	14.10	17.79	32.10	32.32	3.69	-	461
Dis. of Blood & Blood-forming Org.	13.16	34.21	18.42	26.32	7.89	-	114
Mental, Psychoneurotic, Etc.	3.41	24.57	49.83	19.80	1.71	0.68	293
Dis. of Nervous Sys. & Sense Org.	26.22	15.94	17.06	28.98	10.54	1.26	797
Diseases of Circulatory System	2.99	10.65	30.06	43.51	12.08	0.71	1,540
Diseases of Respiratory System	55.91	22.95	12.37	7.05	1.47	0.25	5,563
Diseases of Digestive System	18.30	32.77	28.99	17.97	1.80	0.17	3,622
Diseases of Genito-Urinary System	19.29	16.38	23.11	32.39	8.74	0.09	1,099
Deliv. Complic. Preg. Puerperium	-	-	-	-	-	-	-
Dis. of Skin & Cellular Tissue	21.64	41.21	23.31	12.18	1.56	0.10	961
Dis. of Bone & Organs of Movement	14.93	27.15	36.65	17.42	3.17	0.68	442
Congenital Malformations	55.88	22.06	11.77	10.29	-	-	68
Certain Diseases of Early Infancy	98.20	0.90	-	-	0.90	-	111
Symp. Senility & Ill-defined Cond.	18.59	27.21	30.80	18.48	4.14	0.78	893
Accidents, Poisoning & Violence	17.86	38.07	26.59	15.20	1.96	0.32	3,118
Spec. Class. for Spec. Admissions	10.49	25.25	52.46	10.82	-	0.98	305
Not Stated	17.65	42.65	24.51	13.72	1.47	-	204
TOTAL	27.53	26.58	23.50	18.37	3.67	0.35	20,742
DEATHS							
Infective & Parasitic Diseases	28.57	19.05	19.05	19.05	9.52	4.76	21
Neoplasms*	-	3.49	22.09	54.07	19.77	0.58	172
(Malignant Neoplasms	-	3.03	22.42	53.94	20.00	0.61	165)
(Benign Neoplasms	-	33.33	-	66.67	-	-	3)
Allergic, Endocrine, Etc.	-	4.76	23.81	52.38	19.05	-	21
Dis. of Blood & Blood-forming Org.	16.67	-	16.67	33.33	33.33	-	6
Mental, Psychoneurotic, Etc.	20.00	-	20.00	20.00	-	40.00	5
Dis. of Nervous Sys. & Sense Org.	2.68	2.68	10.71	43.75	33.04	7.14	112
Diseases of Circulatory System	0.28	1.41	16.34	54.37	25.91	1.69	355
Diseases of Respiratory System	9.17	5.50	14.68	36.70	22.02	11.93	109
Diseases of Digestive System	1.30	7.79	24.67	50.65	11.69	3.90	77
Diseases of Genito-Urinary System	2.22	8.89	11.11	44.45	33.33	-	45
Deliv. Compl. Preg. Puerperium	-	-	-	-	-	-	-
Dis. of Skin & Cellular Tissue	12.50	-	37.50	12.50	25.00	12.50	8
Dis. of Bone & Organs of Movement	-	-	-	50.00	50.00	-	2
Congenital Malformations	50.00	16.67	16.67	16.66	-	-	6
Certain Diseases of Early Infancy	100.00	-	-	-	-	-	4
Symp. Senility & Ill-defined Cond.	4.00	4.00	20.00	36.00	28.00	8.00	25
Accidents, Poisoning & Violence	14.71	17.65	16.18	33.82	10.29	7.35	68
Spec. Class. for Spec. Admissions	-	-	-	-	-	-	-
Not Stated	25.00	25.00	-	50.00	-	-	4
TOTAL	4.23	4.81	17.21	47.02	22.69	4.04	1,040

*Total neoplasms includes 46 cases and four deaths unclassified as malignant or benign

TABLE A58

CASES & DAYS OF CARE FOR MALE PATIENTS BY AGE FOR SELECTED DIAGNOSTIC SECTIONS

(Based on morbidity survey of 58,007 discharges and deaths from Region 2 hospitals, 1947)

DIAGNOSTIC SECTION	AGE GROUP IN YEARS						TOTAL NUMBER
	1-14	15-34	35-54	55-74	75 & Over	N.S.	
CASES							
Infective & Parasitic Diseases	134	177	72	44	8	1	436
Neoplasms*	35	82	188	323	79	3	715
(Malignant Neoplasms	6	19	136	293	77	3	534)
(Benign Neoplasms	21	56	34	24	-	-	135)
Allergic, Endocrine, Etc.	65	82	143	149	17	-	461
Dis. of Blood & Blood-forming Org.	15	39	21	30	9	-	114
Mental, Psychoneurotic, Etc.	10	72	146	58	5	2	293
Dis. of Nervous Sys. & Sense Org.	209	127	136	231	84	10	797
Diseases of Circulatory System	46	164	463	670	186	11	1,540
Diseases of Respiratory System	3,110	1,277	688	392	82	14	5,563
Diseases of Digestive System	663	1,187	1,050	651	65	6	3,622
Diseases of Genito-Urinary System	212	180	254	356	96	1	1,099
Deliv. Complic. Preg. Puerperium	-	-	-	-	-	-	-
Dis. of Skin & Cellular Tissue	208	396	224	117	15	1	961
Dis. of Bone & Organs of Movement	66	120	162	77	14	3	442
Congenital Malformations	38	15	8	7	-	-	68
Certain Diseases of Early Infancy	109	1	-	-	1	-	111
Symp. Senility & Ill-defined Cond.	166	243	275	165	37	7	893
Accidents, Poisoning & Violence	557	1,187	829	474	61	10	3,118
Spec. Class. for Spec. Admissions	32	77	160	33	-	3	305
Not Stated	36	87	50	28	3	-	204
TOTAL	5,711	5,513	4,874	3,810	762	72	20,742
DAYS OF CARE							
Infective & Parasitic Diseases	2,865	1,775	1,081	894	382	10	7,007
Neoplasms*	192	731	3,543	6,903	2,116	14	13,499
(Malignant Neoplasms	36	247	3,210	6,500	2,104	14	12,111)
(Benign Neoplasms	137	438	181	310	-	-	1,066)
Allergic, Endocrine, Etc.	596	815	2,033	2,303	407	-	6,154
Dis. of Blood & Blood-forming Org.	167	149	140	515	212	-	1,183
Mental, Psychoneurotic, Etc.	129	351	928	1,021	37	3	2,469
Dis. of Nervous Sys. & Sense Org.	1,712	1,286	3,154	5,491	1,250	813	13,706
Diseases of Circulatory System	517	1,915	5,805	13,582	4,886	240	26,945
Diseases of Respiratory System	8,095	4,504	5,030	4,373	1,452	145	23,599
Diseases of Digestive System	4,701	10,412	11,459	9,426	1,177	74	37,249
Diseases of Genito-Urinary System	1,132	1,451	2,730	7,700	2,486	3	15,502
Deliv. Complic. Preg. Puerperium	-	-	-	-	-	-	-
Dis. of Skin & Cellular Tissue	1,635	2,049	1,805	1,822	202	11	7,524
Dis. of Bone & Organs of Movement	1,017	1,469	1,849	1,277	353	111	6,076
Congenital Malformations	438	88	76	57	-	-	659
Certain Diseases of Early Infancy	1,693	11	-	-	50	-	1,754
Symp. Senility & Ill-defined Cond.	1,028	1,260	2,303	1,391	500	22	6,504
Accidents, Poisoning & Violence	4,912	9,305	9,352	7,702	1,822	84	33,177
Spec. Class. for Spec. Admissions	290	403	463	198	-	10	1,364
Not Stated	411	738	527	432	46	-	2,154
TOTAL	31,530	38,712	52,278	65,087	17,378	1,540	206,525

*Total neoplasms includes 46 cases (322 days of care) unclassified as malignant or benign

TABLE A59

% DISTRIBUTIONS OF FEMALE DISCHARGES & DEATHS BY AGE FOR SELECTED DIAGNOSTIC SECTIONS

(Based on morbidity survey of 58,007 discharges and deaths from Region 2 hospitals in 1947)

DIAGNOSTIC SECTION	AGE GROUP IN YEARS						TOTAL NUMBER
	1-14	15-34	35-54	55-74	75 & Over	N. S.	
CASES							
Infective & Parasitic Diseases	29.90	45.34	13.24	8.09	2.94	0.49	408
Neoplasms*	2.89	23.76	47.88	21.70	3.62	0.15	1,936
(Malignant Neoplasms)	2.20	7.62	38.27	42.67	9.09	0.15	682)
(Benign Neoplasms)	3.38	32.74	53.98	9.31	0.42	0.17	1,182)
Allergic, Endocrine, Etc.	6.06	17.68	33.16	37.68	5.03	0.39	775
Dis. of Blood & Blood-forming Org.	11.35	24.82	29.79	24.82	9.22	-	141
Mental, Psychoneurotic, Etc.	1.40	34.17	42.58	19.33	1.68	0.84	357
Dis. of Nervous Sys. & Sense Org.	22.99	18.61	19.47	27.98	10.83	0.12	822
Diseases of Circulatory System	2.25	14.61	32.27	34.46	13.60	0.81	1,602
Diseases of Respiratory System	54.88	28.13	9.55	5.41	1.56	0.47	5,097
Diseases of Digestive System	13.50	46.77	24.48	12.87	2.03	0.35	3,697
Diseases of Genito-Urinary System	2.07	46.17	37.97	12.82	0.77	0.20	2,465
Deliv. Complic. Preg. Puerperium	0.10	88.04	11.60	0.06	0.03	0.17	15,763
Diseases of Skin & Cellular Tissues	18.92	41.59	23.72	11.86	3.00	0.91	666
Dis. of Bone & Organs of Movement	8.92	28.67	35.90	21.69	3.86	0.96	415
Congenital Malformations	40.39	32.69	15.38	11.54	-	-	52
Certain Diseases of Early Infancy	91.31	6.52	2.17	-	-	-	92
Symp. Senility & Ill-defined Cond.	13.51	34.78	29.50	16.22	5.17	0.82	851
Accidents, Poisoning & Violence	17.35	24.90	22.46	24.60	10.22	0.47	1,683
Spec. Class. for Spec. Admissions	12.19	43.09	31.71	10.57	0.81	1.63	246
Not Stated	11.17	22.84	57.36	8.12	0.51	-	197
TOTAL	12.24	55.79	19.95	9.33	2.36	0.33	37,265
DEATHS							
Infective & Parasitic Diseases	14.29	28.57	7.14	35.71	-	14.29	14
Neoplasms*	2.26	5.26	28.57	48.87	14.29	0.75	133
(Malignant Neoplasms)	2.48	4.96	28.93	47.11	15.70	0.82	121)
(Benign Neoplasms)	-	11.11	22.22	66.67	-	-	9)
Allergic, Endocrine, Etc.	-	2.86	20.00	65.71	11.43	-	35
Dis. of Blood & Blood-forming Org.	14.29	-	14.28	71.43	-	-	7
Mental, Psychoneurotic, Etc.	-	-	100.00	-	-	-	1
Dis. of Nervous Sys. & Sense Org.	0.89	5.36	14.29	50.89	27.68	0.89	112
Diseases of Circulatory System	0.37	1.83	13.55	49.82	32.97	1.46	273
Diseases of Respiratory System	7.79	2.60	6.49	40.26	24.68	18.18	77
Diseases of Digestive System	5.66	5.66	28.30	47.17	3.78	9.43	53
Diseases of Genito-Urinary System	-	27.27	31.82	27.27	9.09	4.55	22
Deliv. Complic. Preg. Puerperium	66.67	33.33	-	-	-	-	9
Dis. of Skin & Cellular Tissue	33.33	33.33	-	33.34	-	-	3
Dis. of Bone & Organs of Movement	-	-	-	50.00	-	50.00	2
Congenital Malformations	80.00	-	-	20.00	-	-	5
Certain Diseases of Early Infancy	100.00	-	-	-	-	-	1
Symp. Senility & Ill-defined Cond.	41.66	-	8.33	45.84	-	4.17	24
Accidents, Poisoning & Violence	14.75	4.92	14.75	16.40	42.62	6.56	61
Spec. Classif. for Spec. Admiss.	-	-	-	-	-	-	-
Not Stated	-	-	-	100.00	-	-	2
TOTAL	5.04	5.28	17.03	45.44	23.14	4.07	834

*Total neoplasms includes 72 cases and three deaths unclassified as malignant or benign.

TABLE A60

CASES & DAYS OF CARE FOR FEMALE PATIENTS BY AGE FOR SELECTED DIAGNOSTIC SECTIONS

(Based on morbidity survey of 58,007 discharges and deaths from Region 2 hospitals in 1947)

DIAGNOSTIC SECTION	AGE GROUP IN YEARS						TOTAL NUMBER
	1-14	15-34	35-54	55-74	75 & Over	N. S.	
CASES							
Infective & Parasitic Diseases	122	185	54	33	12	2	408
Neoplasms*	56	460	927	420	70	3	1,936
(Malignant Neoplasms)	15	52	261	291	62	1	682)
(Benign Neoplasms)	40	387	638	110	5	2	1,182)
Allergic, Endocrine, Etc.	47	137	257	292	39	3	775
Dis. of Blood & Blood-forming Org.	16	35	42	35	13	-	141
Mental, Psychoneurotic, Etc.	5	122	152	69	6	3	357
Dis. of Nervous Sys. & Sense Org.	189	153	160	230	89	1	822
Diseases of Circulatory System	36	234	549	552	218	13	1,602
Diseases of Respiratory System	2,797	1,434	487	276	79	24	5,097
Diseases of Digestive System	499	1,729	905	476	75	13	3,697
Diseases of Genito-Urinary System	51	1,138	936	316	19	5	2,465
Deliv. Complic. Preg. Puerperium	16	13,877	1,829	10	5	26	15,763
Diseases of Skin & Cellular Tissue	126	277	158	79	20	6	666
Dis. of Bone & Organs of Movement	37	119	149	90	16	4	415
Congenital Malformations	21	17	8	6	-	-	52
Certain Diseases of Early Infancy	84	6	2	-	-	-	92
Symp. Senility & Ill-defined Cond.	115	296	251	138	44	7	851
Accidents, Poisoning & Violence	292	419	378	414	172	8	1,683
Spec. Class. for Spec. Admissions	30	106	78	26	2	4	246
Not Stated	22	45	113	16	1	-	197
TOTAL	4,561	20,789	7,435	3,478	880	122	37,265
DAYS OF CARE							
Infective & Parasitic Diseases	1,798	2,279	504	392	319	83	5,375
Neoplasms*	205	4,822	12,925	8,840	1,946	85	28,823
(Malignant Neoplasms)	115	1,279	5,160	6,963	1,746	57	15,320)
(Benign Neoplasms)	86	3,438	7,574	1,173	52	28	12,351)
Allergic, Endocrine, Etc.	398	1,212	3,672	5,466	1,585	54	12,387
Dis. of Blood & Blood-forming Org.	172	279	786	743	396	-	2,376
Mental, Psychoneurotic, Etc.	77	1,060	1,880	1,189	354	3	4,563
Dis. of Nervous Sys. & Sense Org.	1,166	1,012	2,135	5,751	1,653	79	11,796
Diseases of Circulatory System	506	2,015	7,153	12,873	6,962	250	29,759
Diseases of Respiratory System	6,818	5,637	3,659	3,816	1,382	147	21,459
Diseases of Digestive System	3,596	13,375	11,532	8,825	1,350	126	38,804
Diseases of Genito-Urinary System	476	9,193	10,539	4,396	336	39	24,979
Deliv. Complic. Preg. Puerperium	94	98,209	13,692	68	172	174	112,409
Diseases of Skin & Cellular Tissue	898	1,805	1,364	883	382	33	5,365
Dis. of Bone & Organs of Movement	459	1,546	2,070	3,328	1,070	61	8,534
Congenital Malformations	222	196	56	92	-	-	566
Certain Diseases of Early Infancy	1,199	43	12	-	-	-	1,254
Symp. Senility & Ill-defined Cond.	658	1,821	1,741	1,681	1,709	21	7,631
Accidents, Poisoning & Violence	2,259	3,490	5,001	7,446	6,312	401	24,909
Spec. Class. for Spec. Admissions	321	524	564	179	84	19	1,691
Not Stated	279	358	539	316	64	-	1,556
TOTAL	21,601	148,876	79,824	66,284	26,076	1,575	344,236

*Total neoplasms includes 72 cases (1,152 days of care) unclassified as malignant or benign.

TABLE A61

LENGTH OF STAY RELATED TO DISCHARGES AND DEATHS FOR DIAGNOSTIC SECTIONS

(Based on Morbidity Survey of 58,007 discharges & deaths from Region 2 hospitals in 1947)

DIAGNOSTIC SECTION	LENGTH OF STAY						TOTAL
	1-7 days	8-13 days	14-27 days	28-41 days	42 days 3 mon.	3 mon. & over	
CASES							
Infective & Parasitic Diseases	380	209	147	46	51	11	844
Neoplasms	1,002	697	630	157	121	44	2,651
Allergic Endocrine, Etc.	447	379	284	66	46	14	1,236
Dis. of Blood & Blood-forming Org.	139	35	46	20	11	4	255
Mental, Psychoneurotic, Etc.	388	122	89	35	10	6	650
Dis. of Nervous Sys. & Sense Org.	879	372	234	55	45	34	1,619
Diseases of Circulatory System	1,404	642	582	238	214	62	3,142
Diseases of Respiratory System	9,042	975	479	98	54	12	10,660
Diseases of Digestive System	3,268	2,627	1,138	163	110	13	7,319
Diseases of Genito-Urinary System	1,847	788	675	143	96	15	3,564
Deliv. Compl. Preg. Puerperium	8,581	6,792	356	25	7	2	15,763
Dis. of Skin & Cellular Tissue	1,140	290	142	30	20	6	1,628
Dis. of Bone & Organs of Movement	368	218	173	51	29	18	857
Congenital Malformations	64	30	22	1	2	1	120
Certain Diseases of Early Infancy	80	50	47	16	8	2	203
Symp. Senility & Ill-defined Cond.	1,232	275	167	36	25	9	1,744
Accidents, Poisoning & Violence	3,159	674	484	170	214	99	4,800
Spec. Class. for Spec. Admissions	435	73	33	6	2	2	551
Not Stated	146	196	45	9	3	2	401
TOTAL	34,001	15,444	5,773	1,365	1,068	356	58,007
DEATHS							
Infective & Parasitic Diseases	21	8	2	1	3	-	35
Neoplasms	88	40	71	39	39	28	305
Allergic, Endocrine, Etc.	30	8	11	2	4	1	56
Dis. of Blood & Blood-forming Org.	6	2	2	1	1	1	13
Mental, Psychoneurotic, Etc.	5	-	-	1	-	-	6
Dis. of Nervous Sys. & Sense Org.	144	34	22	3	8	13	224
Diseases of Circulatory System	352	91	91	34	37	23	628
Diseases of Respiratory System	121	26	15	10	6	8	186
Diseases of Digestive System	67	18	29	4	8	4	130
Diseases of Genito-Urinary System	33	11	10	5	4	4	67
Deliv. Compl. Preg. Puerperium	8	-	1	-	-	-	9
Dis. of Skin & Cellular Tissue	7	2	-	-	1	1	11
Dis. of Bone & Organs of Movement	1	-	2	-	1	-	4
Congenital Malformations	8	1	2	-	-	-	11
Certain Diseases of Early Infancy	4	-	1	-	-	-	5
Symp. Senility & Ill-defined Cond.	31	5	5	2	2	4	49
Accidents, Poisoning & Violence	91	9	9	4	13	3	129
Spec. Class. for Spec. Admissions	-	-	-	-	-	-	-
Not Stated	4	-	-	1	-	1	6
TOTAL	1,021	255	273	107	127	91	1,874

TABLE A62

PERCENTAGE OF DISCHARGED PATIENTS IN SELECTED AGE GROUPS BY LENGTH OF STAY

(Public General Hospitals of Region 2, 1947)

AGE GROUP IN YEARS	LENGTH OF STAY							
	1-3 Days	4-7 Days	8-10 Days	11-13 Days	14-20 Days	21-27 Days	28-34 Days	35-41 Days
Under 1	24.33*	33.89	12.64	8.69	9.24	5.05	2.21	1.66
1-4	65.99	18.61	6.64	3.24	2.54	1.16	0.34	0.31
5-14	67.60**	17.83	6.64	2.63	2.49	0.91	0.61	0.37
15-24	27.53*	37.11	24.49	5.72	3.18	0.83	0.39	0.19
25-34	22.30*	34.09	28.25	8.28	4.49	1.21	0.52	0.28
35-44	25.48	27.42	19.51	11.12	9.56	3.20	1.41	0.70
45-54	24.80*	21.68	13.61	12.42	13.94	5.66	2.73	1.84
55-64	20.12	18.83	12.45	10.14	15.39	8.16	4.44	2.55
65-74	20.03*	20.46	13.83	9.12	13.76	7.27	3.92	2.57
75 & Over	16.88	16.64	11.09	7.62	14.62	7.62	5.79	3.84
Not Stated	38.46	20.00	16.41	5.64	6.15	3.59	3.08	1.03
TOTAL	30.69***	27.92	18.85	7.78	7.09	2.86	1.47	0.88

AGE GROUP IN YEARS	LENGTH OF STAY						CASES
	42-48 Days	49-55 Days	56 days <3 mos.	3<6 mos.	6<12 mos.	1 year & over	
Under 1	0.47	0.55	0.95	0.32	-	-	1,266
1-4	0.37	0.22	0.28	0.24	0.03	0.03	3,267
5-14	0.31	0.07	0.30	0.17	0.07	-	5,739
15-24	0.17	0.08	0.19	0.12	-	-	12,952
25-34	0.22	0.11	0.16	0.06	0.02	0.01	13,350
35-44	0.45	0.21	0.57	0.28	0.08	0.01	7,042
45-54	0.68	0.61	1.25	0.55	0.17	0.06	5,267
55-64	2.19	1.26	2.72	1.21	0.32	0.22	5,885
65-74	2.00	1.28	3.06	1.64	0.85	0.21	1,403
75 & Over	2.62	2.44	5.54	3.59	1.28	0.43	1,641
Not Stated	-	0.51	3.08	1.54	0.51	-	195
TOTAL	0.61	0.39	0.85	0.43	0.13	0.05	58,007

* Includes 1 case discharged day of entry.

** Includes 2 cases discharged day of entry.

*** Includes 7 cases discharged day of entry.

TABLE A63

NUMBERS OF DISCHARGED PATIENTS IN VARIOUS METHOD OF PAYMENT GROUPS

(Public General Hospitals in Region 2, 1947)

METHOD OF PAYMENT	Cases		Days		AVERAGE STAY
	Number	Per Cent	Number	Per Cent	
Self	31,966	55.11	262,548	47.67	8.21
Blue Cross	11,033	19.02	93,433	16.96	8.47
Hospital Co-operative	37	0.06	482	0.09	13.03
Insurance Profit	5,661	9.76	45,758	8.31	8.08
Insurance Non-profit	434	0.75	3,602	0.65	8.30
W. C. B.	1,476	2.54	16,938	3.08	11.48
Municipal Indigent	4,442	7.66	103,374	18.77	23.27
Provincial Indigent	380	0.66	2,913	0.53	7.67
Federal Government	643	1.11	4,453	0.81	6.93
Employers Benefit	954	1.64	9,459	1.72	9.92
Employers Liability	2	0.00	2	0.00	1.00
Service Clubs	65	0.11	709	0.13	10.91
Mutual Benefit	68	0.12	851	0.15	12.51
Hospital Staff	748	1.29	5,001	0.91	6.69
Floater	45	0.08	889	0.16	19.76
Courtesy & Miscellaneous	53	0.09	349	0.06	6.58
TOTAL	58,007	100.00	550,761	100.00	9.49

TABLE A64

% OF DAYS OF CARE IN SELECTED LENGTH OF STAY GROUPS BY METHOD OF PAYMENT
(Public General Hospitals in Region 2, 1947)

METHOD OF PAYMENT	LENGTH OF STAY							
	1-3 Days	4-7 Days	8-10 Days	11-13 Days	14-20 Days	21-27 Days	28-34 Days	35-41 Days
Self	5.97	21.99	21.50	9.92	11.44	6.17	4.43	2.88
Blue Cross	5.94	16.21	20.14	13.13	16.09	8.37	5.58	3.96
Hospital Co-operative	2.91	12.86	11.41	2.28	17.22	5.39	12.24	-
Insurance Profit	6.62	16.80	20.56	13.05	15.04	7.67	3.67	3.17
Ins. Non-profit	5.41	17.77	30.62	11.77	10.72	10.22	2.58	1.08
W. C. B.	5.20	10.37	9.93	9.94	15.81	9.26	4.32	3.81
Municipal Indigent	1.54	4.52	5.59	4.03	7.88	7.16	5.08	4.78
Provincial Indigent	14.25	2.51	9.16	20.15	11.88	2.68	4.22	4.02
Federal Government	11.99	15.09	11.88	7.57	10.69	8.85	6.33	2.67
Employers Benefit	4.61	13.36	14.17	12.32	18.35	13.84	4.92	5.20
Service Clubs	4.37	12.98	7.05	13.82	12.83	6.35	3.95	-
Mutual Benefit	2.23	12.57	8.81	11.05	21.27	8.93	22.21	12.93
Hospital Staff	14.85	20.57	11.16	9.38	14.20	5.12	5.54	1.40
Floater	1.57	7.42	6.86	5.29	-	2.59	3.60	12.60
Courtesy & Misc.	10.83	26.21	30.20	3.70	7.98	13.10	7.98	-
TOTAL	5.30	16.54	17.48	9.69	12.13	7.10	4.74	3.51

METHOD OF PAYMENT	LENGTH OF STAY						TOTAL DAYS
	42-48 Days	49-55 Days	56 Days ≤ 3 Mos.	3 < 6 Mos.	6 < 12 Mos.	1 Year & Over	
Self	2.35	1.76	4.75	3.75	2.05	1.04	262,548
Blue Cross	2.82	1.60	3.70	2.11	0.35	-	93,433
Hospital Co-operative	-	-	-	35.69	-	-	482
Insurance Profit	2.52	1.67	3.96	3.05	-	2.22	45,758
Ins. Non-profit	3.66	-	3.28	2.89	-	-	3,602
W. C. B.	5.08	3.70	9.00	9.10	4.48	-	16,938
Municipal Indigent	3.77	3.12	14.09	13.72	11.62	13.10	103,374
Provincial Indigent	9.13	3.57	11.88	6.55	-	-	2,913
Federal Government	3.17	4.60	10.13	7.03	-	-	4,453
Employers Benefit	3.68	2.13	3.64	3.78	-	-	9,459
Service Clubs	25.67	-	-	12.98	-	-	709
Mutual Benefit	-	-	-	-	-	-	851
Hospital Staff	0.84	4.22	7.72	5.00	-	-	5,001
Floater	-	-	22.50	37.57	-	-	889
Courtesy & Misc.	-	-	-	-	-	-	351
TOTAL	2.88	2.08	6.48	5.58	3.35	3.14	550,761

TABLE A65

DISCHARGED PATIENTS & DAYS OF CARE BY RESIDENCE & HOSPITAL

(Public General Hospitals in Region 2, 1947)

HOSPITAL	Relationship Between Patient Residence and Hospital Locality					TOTAL
	Same Municip- ality	County Apart from Municip- ality	Prov. Other County	Unorg. Dists. in Ont.	Out- side Prov.	
<u>CASES</u>						
Cottage, Niagara-on-the-Lake	233	157	11	-	10	411
West Lincoln Mem., Grimsby	221	432	42	-	2	697
Haldimand War Mem., Dunnville	396	213	76	43	-	728
Willett, Paris	511	154	114	-	1	780
Norfolk General, Simcoe	686	1,494	75	1	9	2,265
Douglas Memorial, Fort Erie	904	450	29	-	29	1,412
Welland County General	2,498	1,871	109	-	14	4,492
Niagara Falls General	3,947	1,022	359	1	87	5,416
St. Catharines General	4,832	1,674	869	-	45	7,420
Brantford General	4,405	1,472	703	-	60	6,645*
St. Joseph's Gen., Hamilton	5,234	891	1,213	2	26	7,366
Hamilton General	15,851	2,198	2,247	4	74	20,375**
TOTAL	39,718	12,028	5,847	51	357	58,007***
<u>DAYS</u>						
Cottage, Niagara-on-the-Lake	1,655	1,014	41	-	48	2,758
West Lincoln Mem., Grimsby	2,175	2,683	222	-	9	5,089
Haldimand War Mem., Dunnville	2,813	1,441	373	258	-	4,885
Willett, Paris	4,998	1,107	809	-	3	6,917
Norfolk General, Simcoe	4,363	11,715	508	2	33	16,621
Douglas Memorial, Fort Erie	6,207	3,503	88	-	170	9,968
Welland County General	15,546	13,858	884	-	158	30,446
Niagara Falls General	37,233	8,957	2,957	11	672	49,830
St. Catharines General	33,999	11,700	6,620	-	363	52,682
Brantford General	51,670	15,283	8,472	-	593	76,166*
St. Joseph's Gen., Hamilton	45,307	8,628	12,493	15	239	66,682
Hamilton General	176,710	22,159	28,624	35	1,159	228,717**
TOTAL	382,676	102,048	62,091	321	3,447	550,761***

* Includes 5 cases of unknown residence, contributing 148 days.

** Includes 1 case of unknown residence, contributing 30 days.

*** Includes 6 cases of unknown residence, contributing 178 days.

**SOLICITATION OF FUNDS
FROM THE PUBLIC**

Including:-

- (a) Extracts from the Department of Public Welfare Act;
- (b) A recommendation that the government of Ontario exercise control over the solicitation of funds from the public for health and welfare purposes, and over the use to which such funds are put.

SOLICITATION OF FUNDS FROM THE PUBLIC

In view of the magnitude of funds donated each year by the people of Ontario in response to appeals by a growing number of voluntary health and welfare organizations, the Ontario Health Survey Committee feels that some procedure should be introduced by the Government of Ontario which would give the public formal assurance that monies thus collected are spent in the wisest and most beneficial way.

Such assurance might involve the initiation of a system of licensing such as is in force in the State of Pennsylvania where there is an act relating to and regulating the solicitation of monies and property for charitable, benevolent and other purposes. Or it might be sufficient simply to make use of the legislative authority which already exists in the Department of Public Welfare Act (Statutes of Ontario, 1948, Chapter 23).

Section 4 and 6 of this act read as follows:-

Section 4. The Minister may, -

*Powers
of the
Minister*

- (a) institute inquiry into and collect information and statistics relating to all matters of public welfare;
- (b) disseminate information in such manner and form as may be found best adapted to promote public welfare;
- (c) secure the observance and execution of the provision of all Acts and regulations dealing with matters of public welfare;
- (d) cause investigation to be made into all activities, agencies, organizations, associations or institutions having for their object the social welfare or care of men, women or children in Ontario and which are not under the control of any other department of the public service of Ontario; and
- (e) declare any institution or organization to be a charitable institution. R. S. O. 1937, c. 61, s. 4; 1946, c. 21, s. (2), amended.

Section 6. The Lieutenant-Governor in Council may, --

*Control
over
chari-
table
insti-
tutions* (a) declare any institution or organization having charitable objects or purposes, or any class or classes of such institutions or organizations, to be subject to the control of the Minister; and

- (b) make regulations governing the operation and activities of institutions and organizations which are declared to be subject to the control of the Minister under this section, including regulations governing the procuring of funds from the public and the application thereof by such institutions and organizations. R. S. O. 1937, c. 61, s. 6, amended.

The appeals made in Ontario are in some cases national in scope, in others provincial, and in still others they are local only. It would appear, however, that any form of licensing, control or supervision in this field could be most effectively applied at the provincial level. Constitutionally it may be found that any such action is beyond the jurisdiction of the federal government except in time of national emergency.

Where any aspects of fraud are concerned, the Criminal Code of Canada can be invoked; and, if the matter is one coming under the regulations affecting public interest, the postal regulations provide some protection to the public.

In recommending that some machinery be set up and used to safeguard the heavy public investment in health and welfare through solicited donations, the Survey Committee has no desire to stifle or impede the valuable voluntary work now being done by many organizations which merit public support. In fact the Committee urges some measure of control in the interests of both the public who pays and the organizations which are honestly striving to improve the lot of the less fortunate. A regular, published accounting of funds raised and the use to which they are put each year should tend to increase public confidence in the activities of such voluntary groups and lead to their stronger support.

**REPORT OF THE ONTARIO
HEALTH SURVEY COMMITTEE**

SECTION B

MENTAL FACILITIES AND SERVICES

(Pages 107 to 154)

B. MENTAL FACILITIES AND SERVICES

CONTENTS

	Page
Summary	110
Recommendations	112
Chapter I: Community Clinics	113
Chapter II: Training Facilities	122
Chapter III: Mental Hospital Facilities	124
Chapter IV: Mental Health Facilities for the Courts	143
Chapter V: Mental Health Services for Schools	148
Chapter VI: Mental Health Services for Reform Institutions	149
Chapter VII: Particular Problems --	
Voluntary Agencies	152
Toronto Metropolitan Area	152
Senile Patients	152
Alcoholism and Drug Addiction	152
After-Care and Rehabilitation ...	153
Chapter VIII: Psychiatrists in Private Practice	154
Chapter IX: Finance	156

MENTAL FACILITIES AND SERVICES

SUMMARY

This study of existing facilities for diagnosis and treatment of mental illness in Ontario, and the inadequacy of those facilities, leaves no room for complacency. By conservative estimate, based on facts in this report, this province today has an urgent need for 31 community mental health clinics, 157 additional psychiatrists, and 11,416 additional mental hospital beds (including 2,400 under construction).

A few examples of what occurs as a result of the shortage of mental hospital beds, treatment facilities, and specially trained personnel, demonstrate the urgency of the needs. There are cases involving mentally ill persons, in need of immediate treatment, who have had to be held as long as 66 days in a local jail before admittance to an already overcrowded hospital could be obtained. At Toronto Psychiatric Hospital it has sometimes been necessary to place children as young as eight years in the same ward with mentally ill adults. Lack of staff and overcrowding have made it possible to furnish such modern treatment as insulin to only a fraction of the patients who could reasonably be expected to benefit from it.

Overburdened with work and with numbers of patients, the doctors, nurses, attendants and other members of the staff of the 14 Ontario mental hospitals are providing the best service within their power; but this is not enough. At present there is an average of one physician for every 301 mental patients in the 14 hospitals, whereas the standard considered necessary to permit reasonable care and treatment is one for every 150 patients. The requirements of the fifteenth hospital, the Toronto Psychiatric Hospital, are different and are dealt with separately in this report.

Shortage of trained personnel--traceable to weaknesses in both psychiatric training facilities and the salary scale for such specialists in this province--is an underlying cause of the critical shortcomings in Ontario's mental health program. Since our existing hospitals are able to find only half the doctors they need, it would be practically useless to add hospitals, hospital beds, and clinics to our present accommodation without providing the means for training and retaining the services of more psychiatrists to staff them. It would be a mistake to seek the solution to Ontario's mental health problem in half measures--by providing personnel without clinics and hospitals, or by building with bricks and mortar and failing to train mental health specialists. The two are opposite sides of the same coin; and to achieve maximum benefit from either, both must proceed simultaneously.

The earliest provision in this province for "insane persons", as they were then called, was "An Act to authorize the Quarter Sessions of the Home District to provide for the relief of insane destitute persons in that district". Passed in March, 1830, this act required the clerk of the peace to lay before the grand jury of the sessions an account of money necessary for maintaining insane persons. The grand jury made annual presentment of what was reasonable for the support of insane persons either in gaol or some other place. The sum of money presented was paid by the treasurer of the district. This act was continued for two years by 3 Wm. IV, C.46; revived and continued by 7 Wm. IV, C.29; and was continued by 4 and 5 Vict., C.23. Throughout this period no institutions were set apart for the care of insane persons: they were cared for in the common gaol.

In May, 1839, an act was passed entitled "An Act to authorize the erection of an Asylum within this Province for the reception of Insane persons". The institution established under this act is now known as the Ontario Hospital, Toronto, at 999 Queen Street West.

Since that time Ontario has become a leader in the provision of mental health facilities. It was the first province in Canada to introduce travelling clinics for the diagnosis and treatment of mental illness; the first to introduce modern and humane legal procedures for the hospital examination of persons charged with offences and requiring mental examination.

If Ontario is to maintain its position of leadership in this field, action has to be taken to avert the present downward trend in the provision of mental health facilities.

The magnitude of the mental health problem in Ontario can perhaps be better appreciated when it is realized that at the basic date of this survey there were actually more patients (15,969) in the 14 Ontario mental hospitals (not including the Toronto Psychiatric Hospital) than in all 146 general hospitals in the province. (There were 13,795 patients in the latter). And whereas the average length of stay in a general hospital is now about 9.9 days, there are patients in Ontario mental hospitals who have spent as long as 46 years there. There are 2,780 mental patients who have spent more than 20 years in hospital; 44.8 per cent of mental patients in the province have been there for more than 10 years; and 63.9 per cent have spent more than five years in hospital.

In addition to the present population of Ontario mental hospitals, there are long waiting lists of mentally ill persons in need of treatment and hospitalization. There was, for example, at the time of this survey, a list of more than 1,500 mentally defective children under the age of 16 awaiting admission to one institution, the Ontario Hospital, Orillia. And this 1,500 is only a fraction of the total number of mental cases requiring hospitalization, as it does not include those awaiting admission to the other 13 institutions.

Stressing the preventive aspect of Ontario's mental health program, the committee believes that the establishment of 31 regionally located clinics, staffed and equipped to give diagnosis and treatment, can do more for the mental health of the province than could any other single project. It is estimated that these 31 clinics can be maintained at an annual cost of about \$600,000--approximately one quarter of Ontario's share of the federal grant for mental health purposes.

In 1938, the Royal Commission to Investigate the Penal System of Canada stated in its report (the Archambault Report--page 190): "As previously indicated; your Commissioners are of the opinion that a psychiatrist would be of inestimable value in dealing with children's cases. If the juvenile court system is to be extended throughout Canada, we strongly recommend that definite arrangements be made for the services of competent psychiatrists". Of the 33 juvenile courts in Ontario, one (Toronto) has a full-time psychiatric service; nine have reasonably adequate facilities; five have some facilities; and 18 have no mental health facilities at all. Juvenile courts and magistrates' courts are two further areas where important mental health work can be done.

Provision of suitable and adequate mental health service to the school population of the province

and to inmates of our reform institutions would, in the opinion of the committee, be worthwhile extensions of Ontario's mental health program.

Since there were only 37 psychiatrists engaged in private practice in the entire province when this survey was made, it is obvious that we will suffer from a dearth of these specialists for many years to come. It is vital, therefore, that the mental health facilities of the province be so organized that the services of available psychiatrists can be utilized on a part time basis for the greatest public good.

Without underestimating the value and importance of voluntary agencies, it is none the less true that mental health services must be financed almost entirely by taxation. The government of Ontario is spending approximately \$12,000,000 a year for this purpose now, apart from the capital cost of building mental hospitals. When the federal government grant reaches its maximum, Ontario will be entitled to approximately \$2,300,000 a year for mental health purposes. The maintenance of existing facilities and any improvement or expansion are likely to be financed from these two sources.

It is clearly in the public interest, then, that the facts concerning Ontario's mental health program be made known to all who contribute to its support and who benefit from its extension and improvement. As in other segments of the health field, the emphasis is swinging today toward the preventive aspects of mental health work. Education of the public toward a fuller appreciation of what is being done and what can be done is an important phase of this preventive approach, and such education is one of the functions of this report envisaged by the Ontario Health Survey Committee.

MENTAL FACILITIES AND SERVICES

RECOMMENDATIONS

It is recommended:-

- 1 - That the Ontario Department of Health establish and maintain 31 community mental health clinics located, where possible, in public general hospitals. These clinics would provide a consulting and diagnostic service, and, in addition, treat patients, many of whom will not require admission to a mental hospital. Annual cost of the clinics is estimated at \$600,000 (Chapter I).
- 2 - That the universities of Ontario be granted sufficient funds to train psychiatrists and other professional personnel to relieve the present shortage and to make possible the recommended mental health program. Annual cost of this training is estimated at \$500,000 (Chapter II).
- 3 - That 11,416 beds (inclusive of 2,400 beds under construction) be added to the existing mental hospital accommodation to relieve overcrowding, which at the time of this survey amounted to 2,926 patients; and to accommodate mentally ill persons who cannot now be admitted because of lack of accommodation. (There were more than 1,500 children in the latter category awaiting admission to one mental hospital--Chapter III).
- 4 - That 53 psychiatrists be added to the medical staffs of existing mental hospitals to meet immediate needs, and that an increased number of psychologists, social workers, occupational therapists and physiotherapists be employed as they become available (Chapter III).
- 5 - That mental health services be provided for all juvenile and family courts, by the establishment of permanent court clinics in larger centres, and elsewhere through the community clinics recommended in Chapter I; and that the mental health services for magistrates' courts in Ontario be improved and extended (Chapter IV).
- 6 - That school mental health services now operated by the larger municipalities be continued; and that such school services be provided elsewhere in Ontario through the community clinics recommended in Chapter I (Chapter V).
- 7 - That mental health facilities in the Toronto area be increased by the establishment of seven community clinics (as recommended in Chapter I) and by an addition to the Toronto Psychiatric Hospital, including a special unit for children (Chapter VII).
- 8 - That public general hospitals establish facilities for the treatment of patients who are suffering from the less severe forms of mental illness (Chapter III).
- 9 - That 1,100 senile patients in Ontario mental hospitals at the time of this survey be cared for in a special type of institution suitable for aged persons (Chapter VII).
- 10 - That special treatment facilities for alcoholics and drug addicts be established, with adequate provision for both physical and psychological treatment (Chapter VII).
- 11 - That in order to make possible the early implementation of various of these recommendations, despite the acute shortage of psychiatrists, an effort be made to employ on a part-time basis in the public service psychiatrists who are engaged in private practice (Chapter VIII).

CHAPTER I

COMMUNITY CLINICS

The survey of existing clinics comprises four groups, namely, (a) clinics operated by the Province of Ontario, (b) clinics in general hospitals, (c) clinics operated by municipal health departments and (d) clinics operated by voluntary agencies.

The existing clinics are limited in two ways. The first limitation is geographic: many areas of the province have no service. The second limitation is functional: most of the clinics can perform only a diagnostic function and are not able to provide treatment.

After a consideration of the existing facilities, this part of the report will conclude with a recommendation for the establishment of 31 clinics to be operated by the Province of Ontario to provide diagnostic and treatment service for the entire province.

The survey of existing facilities with respect to mental health clinics serving communities disclosed the following:-

(a) Clinics operated by Province of Ontario

(i) Travelling Clinics

These clinics are based on Ontario mental hospitals, and are four in number. The mental hospitals which have mental health clinics are Brockville, Kingston, Hamilton and London. These clinics visit certain communities regularly, operate autonomously, except that they are under hospital administration. They serve as a liaison frequently between former patients and the hospital.

The clinic staff usually consists of a psychiatrist, psychologist, and social worker. Frequently the psychologist or social worker is required to carry out duties related to the hospital. At the Brockville Clinic, at the time of the survey, there was no social worker. Considerable time is spent in travelling by the psychiatrist and the psychologist.

Communities served by these clinics and time spent are as follows:

Brockville Clinic - (has clinic on hospital grounds)

At Brockville - One afternoon per week at Children's Aid Society

At Ottawa - weekly clinics. Two half days at Ottawa Civic Hospital and half days at Ottawa General Hospital

Cornwall - two days per month held at health centre

Alfred (boys training school) - one day per month.

In addition to these regular visits, the clinic will make visits to various communities who request examination of urgent cases. Also patients on probation may be followed up.

Hamilton Clinic

Hamilton - two days per month - at court house

Guelph - three days per month

Simcoe - one day per month

Kitchener - four days per month

Brantford - four days per month

Milton - two days per month

Galt - one day per month

Dunnville)
) - by appointment
Shelburne)

Kingston Clinic

Kingston - at Kingston General Hospital
- three half days per month.
School guidance clinic - four half days per month. Consultation to Sunnyside Centre three half days per month.

Belleville - five days per month at Belleville General Hospital.

Picton - one day per month at county health unit

Pembroke - one day per month

Perth - half day per month

Renfrew - one day per month

Smiths Falls - one day per month

London Clinic

London - four half days per month at Victoria Hospital

TABLE B1
CASE LOAD OF TRAVELLING CLINICS, 1948

Clinics	No. of New Cases	No. of Return Cases	No. of Case* Contacts.
Brockville	775	371	4,139
Hamilton	894	839	3,652
Kingston	545	260	2,576
London	677	208	1,444
Total	2,891	1,678	11,811

* means every contact with a patient made by any member of the clinic staff
(including new and return cases).

Source: 82nd annual report of the Mental Hospitals - Department of Health of Ontario.

TABLE B2
NEW CASES IN TRAVELLING CLINICS BY REFERRING AGENCY, 1948

Referring Agency	Brockville	Hamilton	Kingston	London	Total number per cent	
Welfare Agencies	290	141	81	182	694	26.7
Medical Agencies	311	256	346	292	1,205	46.1
Educational Agencies	38	50	39	26	153	5.9
Courts	95	105	59	128	387	14.8
Family	23	36	4	23	86	3.3
Self	12	19	10	11	52	2.0
Others	2	9	6	15	32	1.2
Total	771	616	545	677	2,609	100.0

- Sarnia - period depending on appointments - at Sarnia General Hospital
- Woodstock - period depending on appointments - at Woodstock General Hospital
- Chatham - period depending on appointments - St. Joseph's Hospital
- Windsor - two days per month at Hotel Dieu Hospital
- Owen Sound - period depending on appointments - at county health unit
- Stratford - period depending on appointments at Stratford General Hospital.
- St. Thomas - period depending on appointments - at Memorial Hospital.

Tables B1 and B2 contain statistical information showing the case load for each of the four travelling clinics, and sources of the cases.

(ii) Mental Health Clinic serving Niagara District

This clinic operates on out-patient clinic at the general hospitals in St. Catharines, Welland and Niagara Falls. It is closely linked with the local county health unit. At the time of survey of Lincoln County Health Unit, this clinic was staffed by only one psychiatrist receiving part time assistance from the psychologist attached to the Ontario Hospital, Hamilton.

Although consultant service is given at the three communities noted, the major part of clinic activity is centred in the St. Catharines area.

Statistical information regarding the Niagara District clinic is contained in Table B3.

Statistics Re Source of Referral, 1948

Agency	Number of Cases
Medical	413
Welfare	45
Courts	44
Educational	20
Others	47
TOTAL	569

(iii) Non-Specific Travelling Clinics

This group deals with the service provided by the Department of Health whereby about once a year, a mental health clinic team is sent to various communities in Northern Ontario for the purpose of giving consultation service. Usually about a week is given to the particular community, at which time referrals, previously arranged, are handled. The communities visited include Timmins, Kirkland Lake, Sudbury.

(iv) Consultation Service to Communities from Adjacent Ontario Hospitals.

This service varies with the locality. In some places, (for example, Woodstock) the Ontario Hospital supplements the service given by the mental health clinic from the Ontario Hospital, London, usually on request of community agencies. In other areas, this service is negligible, whereas, in places like the Lakehead area, the psychiatrist at the Ontario Hospital has provided a rather extensive consultation service.

(v) Out-Patient Department -- Toronto Psychiatric Hospital

This clinic is staffed by psychiatrists, psychologists and social workers. It provides psychiatric diagnostic and therapeutic service to adults and children, primarily from the Toronto area, and follow-up treatment for patients discharged from the Toronto Psychiatric Hospital.

Facilities are available for undergraduate and postgraduate teaching in psychiatry to physicians, medical students, nurses, psychologists and social workers in the Department of Psychiatry of the University of Toronto with which the hospital is affiliated.

Table B4 contains statistical information regarding case load and sources of cases in this clinic.

(b) Clinics in General Hospitals in Ontario

General hospitals which have any mental health clinic facilities usually receive this service through the travelling mental health clinics operated by the Province. In Toronto and Hamilton, some

TABLE B3

NIAGARA DISTRICT CLINIC: STATISTICS RE CASE LOAD, 1948

Date	St. Catharines			Welland & Niagara Falls			Total		
	New	Return	Total	New	Return	Total	New	Return	Total
1947	375	231	606	270	375	645	645	606	1,251
1948	373	345	718	196	373	569	569	718	1,287

TABLE B4

TORONTO PSYCHIATRIC HOSPITAL - OUT-PATIENT DEPARTMENT - 1948

	Male	Female	Total
New Cases	412	474	886
Return Cases	1,660	1,711	3,371
TOTAL	2,072	2,185	4,257

Source of Referrals to Toronto Psychiatric Hospital, Out-Patient Department, 1948

Referred by	New Cases	Return Cases	Total
Community Services	306	1,049	1,355
Family	97	327	424
Hospitals	92	345	437
Private Physicians	160	565	725
Self	122	662	784
Ontario Training Schools	40	40	80
University Health Service	69	383	452
TOTAL	886	3,371	4,257

general hospitals have their own psychiatric facilities, limited in that they are usually part of the neuro-psychiatric service of the medical department.

The following is a list of hospitals with mental health clinic facilities and the source of this service:-

Civic Hospital, Ottawa
 General Hospital, Ottawa
 General Hospital, St. Catharines
 General Hospital, Welland
 General Hospital, Niagara Falls
 General Hospital, Kingston
 General Hospital, Belleville
 Victoria Hospital, London
 General Hospital, Sarnia
 General Hospital, Woodstock
 General Hospital, Stratford
 St. Joseph's Hospital, Chatham
 Hotel Dieu, Windsor
 Memorial Hospital, St. Thomas.

In all these, clinic facilities are provided through provincially operated units.

Hamilton

General Hospital

- limited clinic facilities provided by private psychiatrists of Hamilton.

Toronto

Hospital for Sick Children

- has a children's clinic functioning

- as part of out-patient services, but located in a self-contained setting.
- staffed by psychiatrist, social worker, psychologist, speech therapists.
- provides training to postgraduate physicians in collaboration with Department of Psychiatry, University of Toronto.
- teaching facilities for undergraduate medical students.

Statistical information regarding this clinic is contained in Tables B5, B6 and B7.

There are limited clinic facilities provided by staff physicians (psychiatrists) as part of the neuropsychiatric service. These are present at:-

Toronto General Hospital
 Toronto Western Hospital
 St. Michael's Hospital
 Mount Sinai Hospital

St. Joseph's Hospital - e.g. (have one half day weekly O.P.D. clinic (neuropsychiatric but primarily psychiatric).
 Referred from (a) other O.P.D. services
 (b) social agencies
 (c) self.

- average about 12 patients per clinic day;
- in-patient psychiatric facilities not present, but patients, if admitted, treated on medical wards.

TABLE B5

HOSPITAL FOR SICK CHILDREN - CLINIC FOR PSYCHOLOGICAL MEDICINE,
STAFF PERSONNEL

<u>Staff</u>	<u>$\frac{1}{2}$ days per week</u>	<u>Staff</u>	<u>$\frac{1}{2}$ days per week</u>
<u>Psychiatrist</u>		<u>Psychiatric Social Workers</u>	
Jan. 1/48 - March 31/48	8	Jan. 1/48 - Jan. 1/49	9
March 31/48 - July 31/48	7	Jan. 1/49 - June 30/49	20
July 31/48 - June 30/49	5		
<u>Psychologist</u>		<u>Speech Therapist</u>	
Jan. 1/48 - March 1/48	3	Jan. 1/48 - Dec. 31/48	3
March 24/48 - June 30/48	3	Jan. 1/49 - June 30/49	3
Nov. 1/48 - June 30/49	7	<u>Secretary</u>	
		Nov. 1/48 - June 30/49	11

TABLE B6

CASELOAD, HOSPITAL FOR SICK CHILDREN, CLINIC FOR PSYCHOLOGICAL MEDICINE

<u>Clinic for Psychological Medicine</u>			
	<u>New Cases</u>		<u>Return Visits</u>
Jan. 1/48 - July 31/48	86		93
Nov. 1/48 - June 30/49	100		171
<u>Psychological Examinations</u>			
Jan. 1/48 - Oct. 30/48			255
Nov. 1/48 - June 30/49			302) 326
		Speech Clinic	24)
<u>Speech Clinic</u>			
	<u>New Cases</u>	<u>Return Cases</u>	<u>Psychometrics</u>
Jan. 1/48 - Dec. 31/48	91	1,016	-
Jan. 1/49 - June 30/49	37	567	24
<u>Neurological Clinic</u>			
	<u>New Cases</u>		<u>Return Visits</u>
Jan. 1/48 - Dec. 31/48	465		751
<u>Neurological Clinic</u>			
	<u>New Cases</u>		<u>Return Visits</u>
Jan. 1/48 - Dec. 31/48	465		751
Jan. 1/49 - June 30/49	187		420
<u>Cerebral Palsy Clinic</u>			
March 1/48 - Dec. 31/48		95	
Jan. 1/49 - June 30/49		136	

TABLE B7

SOURCES OF REFERRALS TO HOSPITAL FOR SICK CHILDREN,
CLINIC FOR PSYCHOLOGICAL MEDICINE

	Jan. 1-July 31 1948		Nov. 15, 1948 to June 30, 1949	
	New	Return	New	Return
Clinic for Psychological Medicine	86	93	100	171
Out-patient Department cases	25	38	19	71
Indoor Cases	7	3	10	37
Agencies - referrals				
1. Alliston Children's Aid Society	2	-	-	-
2. Brantford " " "	-	-	1	-
3. Cobourg " " "	1	-	-	-
4. Galt " " "	1	-	-	-
5. Lindsay " " "	-	-	2	-
6. Port Hope " " "	-	-	2	-
7. Simcoe County " " "	4	-	8	4
8. Toronto " " "	1	5	2	2
9. York County " " "	29	12	44	19
10. Big Brother Movement	1	3	-	-
11. Division of Mental Hygiene	1	2	-	-
12. Earls court Children's Home	-	-	3	8
13. Jewish Child & Family Service	-	1	-	-
14. Neighbourhood Workers Association	2	19	-	4
15. Protestant Children's Home	-	-	2	4
16. Parents	1	3	-	-
17. Private Physician	9	7	6	12
18. Scarboro Schools	1	-	1	10
19. Welfare Council of Toronto	1	-	-	-
	Jan. 1-Oct. 30 1948		Nov. 1, 1948 to June 30, 1949	
Out-patient department cases	120		122	
Indoor cases	74		78	
Agency cases	61		89	
Re-tests	-		13	
Other investigations	-		9	

(c) Clinics Operated by Municipal Health Departments

(i) Hamilton

There is a mental health clinic operating under Hamilton Department of Health. It provides diagnostic and therapeutic facilities for residents of Hamilton.

(ii) Toronto

(a) Division of Mental Hygiene, Department of Health of Toronto. Staffed by a psychiatrist, psychologists, social workers, public health nurses, secretaries. Provides diagnostic and therapeutic service to school children.

(b) Toronto Family Court has a full time psychiatric service, staffed by a psychiatrist, psychologists, and a social worker. Its function is chiefly diagnostic and investigatory to assist the court in management of cases. It is linked with the Department of Psychiatry, University of Toronto, to provide facilities for training for postgraduate physicians.

(d) Clinics Operated by Voluntary Agencies

Ottawa - Catholic Family Agency

Kingston - Sunnyside Centre

This centre is a working example of the kind of development which is required in all of the larger centres of population. In the establishment of the plan for community clinics which is discussed in the following pages, consideration could be given to using some of the funds in the form of a subsidy for the Sunnyside Centre and other similar centres when they become established.

Toronto

Mental Hygiene Consultation Service - (National Committee for Mental Hygiene). The clinic is staffed by psychiatrists, psychologists, social workers and secretaries, and provides limited diagnostic and therapeutic service for adults and children.

Institute for Child Study - The Institute is concerned with research in child growth and parent education. There is a nursery school, staffed by a psychologist and ancillary workers. The Institute is linked with the Department of Psychology, University of Toronto. It is supervised by a Director (psychiatrist). It provides consultation facilities for 13 day nurseries in Toronto.

Agencies which provide psychological services, but which utilize either Toronto Psychiatric Hospital out-patient department or Mental Hygiene Consultation Service for psychiatric aid are:-

Infant's Home

Toronto Children's Aid Society

Big Brother Association

Big Sister Association

Vocational Guidance Centre, Y.M.C.A.

Y.W.C.A.

Students' Health Service, University of Toronto

Forest Hill Village Project

This is primarily a research study (social-ogical) conducted in Forest Hill Village under the aegis of the Department of Psychiatry, University of Toronto, and financed by the federal mental health grant through the Province of Ontario.

There are diagnostic and therapeutic facilities in this setting for children examined in the course of the research.

Toronto Children's Clinics.

Table B8 contains additional information respecting the clinics for children in the Toronto area.

Plan for Establishing Community Mental Health Clinics

The plan which is recommended by the committee is the establishment of 31 clinics to serve the entire province at an estimated cost of \$600,000 per year. Details regarding the location of the clinics, their organization and staff are set out in the following paragraphs.

The function of these clinics would be to provide throughout the province, diagnosis for persons suffering from any form of mental illness and out-patient treatment for those patients who do not require admission to a mental hospital.

The committee is of the opinion that, where possible, such a clinic should be established in a general hospital. This would make possible an interchange of services between the hospital and the clinic which would be mutually advantageous.

In the larger centres, where more than one clinic is required, it would be possible for a certain clinic to assume a specialized function. For example, in Toronto, where seven clinics are required, one clinic could specialize in child psychiatry, another clinic could specialize in the adult field, another clinic could serve the juvenile court, another clinic could be reserved for the magistrates' courts, and so on. In most areas of the province, it will be noted that only one clinic is required. This would be an "all-purpose" clinic similar to the clinic which is now serving the Niagara district. The clinic would see cases on referral from practising physicians in the area, school health services, agencies, juvenile and magistrates' courts, etc.

In most areas, it is considered that it would be feasible for the director (who would be a psychiatrist) to be authorized to engage in a limited

consulting private practice. He should be accepted as a regular member of the staff of the hospital in which the clinic is located, and he should be accepted by the medical practitioners in the community as one of themselves, specializing in a recognized field of medical practice.

(a) Number and Organization of Clinics

Based on the generally accepted standards of one clinic per 100,000 population in urban areas, and one clinic per 200,000 in rural areas, it was estimated that 31 clinics are required in Ontario.

The location of these clinics, based on population distribution, was considered to be as follows:-

Region 1 -- population 732,986 -- number of clinics required - 7

Location

Windsor	2 clinics
London	1 clinic
St. Thomas	1 clinic
Chatham	1 clinic
Kitchener	1 clinic
Sarnia	1 clinic

Region 2 -- population 599,193-- number of clinics required - 4

Location

Hamilton	2 clinics
St. Catharines	1 clinic
Brantford	1 clinic

Region 3 -- population 1,782,004-- number of clinics required - 11

Location

Toronto	7 clinics
Oshawa	1 clinic
Peterborough	1 clinic
Orillia	1 clinic
North Bay	1 clinic

Region 4 -- population 219,064 -- number of clinics required - 3

Location

Kingston	1 clinic
Belleville	1 clinic
Brockville	1 clinic

TABLE B8

TORONTO CHILDREN'S PSYCHIATRIC CLINICAL RESOURCES - 1948

Clinic	Psychiatrists	Psychologists	Social Workers	New Cases per year (approximate)
Hosp. for Sick Children	2½	½	2	150 children
Div. of Mental Hygiene	1½	11	2 (P.H.N.)	500 children (mainly diagnostic)
Toronto Juvenile Court	1	1	1	450 children (mainly diagnostic)
Toronto Psychiatric Hospital	6-10	2	2½	800 all ages (about 80 children)
Mental Hygiene Consultation Service	1¾	½	1½	170 all ages (about 90 children)
Forest Hill Village Children's Service	1	1	1	75 children
York Township Clinic Service	1/5	½	1	70 children
Institute of Child Study	--	¼	--	15 children
Approximate Totals	16	17	11	1,500 -

Region 5 -- population 444,087 -- number of clinics required - 3

Location

Ottawa	2 clinics
Cornwall	1 clinic

Region 6 -- population 313,714 -- number of clinics required - 2

Location

Sudbury	1 clinic
Kirkland Lake	1 clinic

Region 7 -- population 164,578 -- number of clinics required - 1

Location

One of the Lakehead cities.

These clinics would be stationary clinics, except in certain areas such as regions 6 and 7, where facilities for travelling clinics would be required because of the geographical situation.

(b) Staff Structure of the Clinic

This would consist of: psychiatrist, psychologist, social worker, and secretary.

Part time qualified psychiatrists and public health nurses would be used according to the needs of the clinic and the availability of such personnel.

(c) Budget

(i) suggested salary scale of clinic personnel:

Psychiatrist	\$6,000 to \$10,000
Psychologist	\$3,000 to \$ 5,000
Social Worker	\$2,500 to \$ 4,000
Secretary	\$2,000 to \$ 3,000
Part time psychiatrist	at the rate of \$25.00 per half day.

(ii) Maintenance Costs - including materials, equipment, rent, automobile (and its expenses) etc., and to include initial capital outlay estimated at \$4,000 per unit.

Thus the budget would range from \$542,500 to \$806,000.

It is considered that an average figure of \$674,000 would meet the cost of operating these clinics.

Comparison with cost of operating Provincial mental health clinics now functioning.

Present clinics' operating cost is approximately \$70,000 per annum. Thus, the net increase in expenditures considered necessary to provide mental health clinic services for the entire Province is about \$600,000.

Conclusion

High priority should be given, in planning the improvement and extension of mental health services, to the establishment of 31 community clinics. These clinics could provide reasonable diagnostic and treatment services for the entire province.

CHAPTER II

TRAINING FACILITIES

Psychiatrists

The adoption of the recommendation for the establishment of community clinics contained in Chapter I of the report will require the services of at least 31 psychiatrists. Fifty-three psychiatrists should be added to the staffs of the existing mental hospitals. The construction of 11,416 additional hospital beds (recommended in Chapter III of this section) will require an additional 73 psychiatrists. These three avenues of employment would require the services of 157 psychiatrists in addition to the number now employed. The training facilities must be geared to the production of this number of psychiatrists and also to maintain the number at this level, taking into account the number who cease employment through death, retirement, etc.

In the opinion of the committee, the present training facilities can do no more than maintain the number of psychiatrists required in the existing mental hospitals.

The committee is aware that the quality of training is equally as important as the volume. A doctor who has completed his medical studies and one year internship requires a minimum of two years postgraduate training in psychiatry before he is a satisfactory candidate for employment. A minimum of three to four years postgraduate instruction is necessary before a doctor may be classed as a specialist in this field.

At the present time, there are only two institutions in Canada that provide the complete and varied experience requisite for training as a specialist in psychiatry, namely, McGill University and the University of Toronto. The Province of Ontario is therefore dependent upon the University of Toronto for these facilities. Three other universities in Ontario, namely, Queen's University, University of Western Ontario, and the University of Ottawa, will be able to provide a measure of postgraduate education, and they should be encouraged financially to do so up to the limit of their capacity. It should be recognized, however, that certain parts of the postgraduate education of psychiatrists will be possible only at the University of Toronto.

At the time of writing, the University of Toronto has enrolled 28 physicians for postgraduate education in psychiatry. Some of these are entering upon their first year of postgraduate instruction, others are completing their second year, and a few are in their third year.

The Toronto Psychiatric Hospital is the focus of this program, and certain facilities are also available at Sunnybrook Hospital (federal), Toronto General Hospital (Wellesley division), and the Hospital for Sick Children. Several departments of the university collaborate with the department of psychiatry, including the departments of medicine, pathology, paediatrics and psychology and the schools of nursing and social work.

The university is dependent almost entirely upon the mental health grant from the federal government to the Ontario government for the financing of these facilities.

The requirements of the universities are properly a matter for the boards of governors of the universities to submit directly to the government of Ontario. Nonetheless, each of the four universities is represented upon the committee for the purpose of reviewing the whole mental health program as contained in this report. The four universities will doubtless make their representations direct to the government of Ontario and it is to be hoped that their representations will be received in the full knowledge of the urgent situation that is revealed in this report.

Psychologists

The committee has been assisted in the study of the role of psychologists in the mental health field and the training facilities for psychologists by three submissions from the Ontario Psychological Association.

In this connection, it should be noted that the committee has recommended in Chapter I of the report, the employment of 31 psychologists in community mental health clinics. The employment of clinical psychologists in mental hospitals in the United States has progressed much farther than is the case in Ontario. The success of this development in the United States leads the committee to believe that a similar development in Ontario is desirable.

It is considered that the planning of the personnel requirements should take adequate account of the services of psychologists in mental hospitals and community clinics.

Social Workers

The survey committee has been assisted in this study by a presentation from the Canadian Association of Social Workers.

It appears that the role of the social worker is now in the process of development and has not reached the stage where there is any authoritative well-settled statement of the function of the psychiatric social worker, particularly in a mental hospital. This is illustrated by the fact that there are very few social workers employed in the mental hospitals in Ontario.

The committee does not necessarily agree with all of the views contained in the presentation, and is of the opinion that the exact role of the social worker will be elucidated as more workers are employed in hospitals and clinics.

The committee has gone on record in Chapter I by recommending employment of one social worker in each community clinic, and it also recommends more extensive employment of social

workers in mental hospitals. It is considered that the nature and extent of the employment of social workers in mental hospitals should be ascertained in the course of experience by the administrators of the hospital.

Nurses

The committee considered the matter of instruction in psychiatry for undergraduate nurses in general hospitals.

According to a statement issued by the Nurses' Registration Division, Ontario Department of Health, in the "curriculum and information for schools of nursing in Ontario, 1949", psychiatric affiliation for three months will be required for all student nurses who enter schools of nursing on or after the 31st day of August, 1951.

CHAPTER III

MENTAL HOSPITAL FACILITIES

This chapter deals with the hospital facilities for mentally ill, mentally defective, epileptic and habituate (alcoholic and drug addicted) patients. The provision of these hospital facilities has been recognized for over a century as a direct obligation of the government of the province. This survey touches upon the facilities for these patients in general hospitals and in private mental hospitals but it is directed largely to the mental institutions maintained and operated by the Province of Ontario through the Department of Health.

The mental institutions operated by the Department of Health are 15 in number. There are 14 hospitals which are known as "Ontario Hospital _____" followed by the name of the place in which the hospital is located. These 14 hospitals are governed by the Mental Hospitals Act. They are for the treatment of patients suffering from the kind of mental disorder referred to in the foregoing paragraph.

The remaining hospital, known as the Toronto Psychiatric Hospital is governed by the Psychiatric Hospitals Act. The hospital was founded in 1925 as the result of an agreement between the Province of Ontario, the city of Toronto and the University of Toronto. It is a special type of mental hospital, intended primarily for the short term investigation and treatment of persons resident in Toronto and suffering from the less severe mental disorders. The hospital is affiliated with the University of Toronto and is a centre for teaching and research.

The nature and extent of the service performed by the 14 mental hospitals is illustrated by a few citations from the 82nd annual report of the Ontario Hospitals Division of the Department of Health covering the calendar year 1948.

There were 3,032 first admissions and 928 readmissions during the calendar year 1948.

As of December 31, 1948, the total number of mental patients on the books in Ontario's 14 hospitals was 17,903 - an increase of 512 over the previous year. There were 15,969 patients actually in hospital, 1,427 on probation, 490 boarded out, and 17 eloped but not discharged. In addition, there were 71 patients in Toronto Psychiatric Hospital at the end of 1948. Expenditures of the Provincial mental health services during the year 1948 totalled \$11,315,000.

Survey of Provincial Mental Hospitals

Lack of space precludes the publication in this report of the extensive information compiled

with respect to each of the 14 Ontario (mental) Hospitals and the Toronto Psychiatric Hospital. These hospitals were all visited by representatives of the committee. Comprehensive surveys were conducted and reports were made to the committee. These reports have all been filed and are available for future reference.

It is the impression of the committee, after examining conditions in each of the hospitals, that there is room for improvement in the physical state of some buildings. While each Ontario mental hospital is pleasantly situated in parklike grounds, the interiors of most buildings tend to be drab and depressing. Interior decoration generally can be made more attractive at no extra expense and with no sacrifice of practicality. For example there is one ward for difficult mental defectives in which non-porous floors and a better grade of wall and ceiling finish, plus more adequate bathroom facilities, would make the area not only more attractive but immeasurably more sanitary and healthful.

The committee has concentrated its attention on the mental hospital picture viewed as a whole. This chapter analyses the existing hospital facilities throughout the province and concludes with recommendations for the improvement and extension of these facilities. It contains 13 tables and six charts covering statistical information relating to the Ontario hospitals. This information relates to the calendar year, 1948.

Referring to Table B9, it will be noted that there were 16,459 patients in residence (490 of whom were boarded out). The distribution of these patients by age groups is shown. In the same table it will be noted that there were over 3,000 first admissions during the year 1948.

Table B10 shows the overcrowding by hospitals and in total. Thus it will be seen that at the end of 1948 there were 2,926 more patients in residence than the hospitals can properly accommodate.

In Table B11, additional information respecting the patient population is given.

Table B12 calculates the number of beds required to provide adequate accommodation for the mentally ill of Ontario. The calculation is based upon standards issued by the Government of Canada which is quoted in the table.

A total of 24,437 beds are required to serve the existing population of Ontario. The ex-

isting hospitals have a bed capacity of 13,021 (without overcrowding). Therefore, 11,416 additional beds are needed to serve the existing population. This does not provide for an increase in population. If it were assumed that the population of Ontario will increase by 100,000 per year, as it has done in the past few years, 574 beds should be added each year.

The committee is of the opinion that the formula applied in estimating the bed requirements conforms generally with the formulae which have been applied in other countries, particularly in the United Kingdom and in the United States. It should be stressed, however, that the main thing is not a precise mathematical calculation of bed needs. What is important is to have an adequate construction program planned for several years in advance so that each year there is an orderly accretion to the hospital service. This should be an integrated plan so that as the accretion of beds is made, the training facilities are geared to produce the requisite trained staff for the additional hospital accommodation.

The Survey Committee estimates that Ontario needs 11,416 more mental hospital beds. In addition, Ontario should build 574 beds each year to cover the increase in population.

Is this estimate sound? Compare the situation in New York State.

New York State has a population of 14,400,000 compared with Ontario's 4,255,000 for the period to be compared. The population of Ontario is about 30 per cent of the population of New York State.

New York State has 100,000 patients in residence in mental institutions which compare with Ontario's 15,969. If it be assumed for the purpose of this illustration that the incidence of mental illness in Ontario is the same as that of New York State, Ontario would have 30,000 patients in mental institutions (30 per cent of 100,000).

If Ontario adds the 11,416 beds recommended by the committee to the 15,969 beds now occupied, the province will have 27,385 beds. Ontario would still have less accommodation than New York State per population.

The Survey Committee has estimated an increase of 574 per year in the number of persons requiring admission to mental hospitals in Ontario.

It should be apparent that the recommendation for an additional 11,416 beds and an increment of 574 beds annually is a minimum estimate of the needs of the Province of Ontario.

An increasing number of older patients are being admitted to the Ontario Hospitals. For example, 23.4 per cent of the first admissions

during the year 1948 were patients 65 years of age and over.

The question arises as to whether these older patients could be cared for in some other type of institution. The committee estimates that 1,100 of the patients now in residence could be cared for in some other type of institution if such accommodation were available. It should not be assumed too hastily that these 1,100 patients could be transferred, for example, to houses of refuge for the aged and infirm. These patients require considerable medical and nursing care and they can be cared for only in an institution equipped and staffed to provide such care.

Attention is directed to the supply of physicians in the Ontario mental hospitals. Reference should be made to Table B15. Looking at the bottom of the table, it will be seen that there is presently one physician for 301 patients. The committee recommends that the ratio of physicians to patients should be one physician to 150 patients. This is not an ideal standard but after reviewing various standards which have been proposed elsewhere, (for example, by the American Psychiatric Association), the committee is of the opinion that the ratio of one physician to 150 patients would provide for reasonable care and treatment. The table shows that there are 53 physicians for ward duty. This number should be doubled to bring the number of physicians up to the standard recommended by the committee.

The committee made inquiries to ascertain why the number of physicians employed in Ontario Hospitals is so small. The results of these inquiries appear in Charts 1 to 6.

Chart 1 shows the number of physicians in the mental hospital service from 1935 to 1949. The number increased from 1935, reaching a peak in 1939, then declining yearly until 1945. There was an increase in 1946, the number remained stationary for two years and is now declining. In addition, it should be noted that the number of physicians has never reached its prewar strength. During this period, 91 physicians left the Ontario Hospital Service, not including those who were superannuated or died.

Chart 2 gives the age spread of physicians and reveals that the greatest number fall into the 40 to 49 group.

Chart 3 and 4 deal with the length of service and length of service prior to resigning, in the case of those who left the service within the 1935-49 period. These reveal that a considerable number of doctors enter the service and remain for about three years. There is a sharp drop in numbers of doctors having four or five years of service. The largest group of doctors is found in the 20 to 24 years-of-service bracket. It is obvious that the O.H.S. is now largely dependent upon an older group of doctors who will be retiring in a few years.

TABLE B9

FIRST ADMISSIONS AND PATIENTS IN RESIDENCE IN ONTARIO MENTAL HOSPITALS BY AGE
Calendar Year 1948
(not including Toronto Psychiatric Hospital)

AGE GROUPS	ESTIMATED* POPULATION IN ONTARIO 1948 BY AGE GROUPS	FIRST ADMISSIONS		PATIENTS IN RESIDENCE			
		Number	Rate**	Per cent	Number***	Rate**	Per cent
Under 5	438, 600	25	0.06	0.8	31	0.07	0.2
5-9	338, 300	57	0.17	1.9	205	0.61	1.2
10-14	312, 400	66	0.21	2.2	394	1.26	2.4
15-19	329, 400	200	0.61	6.6	716	2.17	4.4
20-24	353, 300	255	0.72	8.4	844	2.39	5.1
25-29	347, 900	250	0.72	8.3	1,068	3.07	6.5
30-34	332, 800	279	0.84	9.2	1,235	3.71	7.5
35-39	304, 200	231	0.76	7.6	1,494	4.91	9.1
40-44	279, 800	257	0.92	8.5	1,581	5.65	9.6
45-49	257, 400	201	0.78	6.6	1,741	6.76	10.6
50-54	236, 400	186	0.79	6.1	1,521	6.43	9.2
55-59	214, 300	176	0.82	5.8	1,485	6.93	9.0
60-64	181, 200	141	0.78	4.7	1,283	7.08	7.8
65-69	142, 100	169	1.19	5.6	1,101	7.75	6.7
70-74	103, 200	179	1.73	5.9	814	7.89	4.9
75-79	67, 400	148	2.20	4.9	515	7.64	3.1
80-84	37, 100	119	3.21	3.9	294	7.92	1.8
85-90	15, 500	74	4.77	2.4	112	7.23	0.7
90-	5, 700	19	3.33	0.6	25	4.39	0.2
ALL AGES	4, 297, 000	3, 032	0.71	100.0	15, 459	0.38	100.0

* Estimate by Dominion Bureau of Statistics.

** Rate per 1,000 population for age groups.

*** Includes patients boarded out.

Source: 82nd Annual Report of Hospitals Division, Department of Health of Ontario.

TABLE B10
ACCOMMODATION IN ONTARIO MENTAL HOSPITALS
(for year ending December 31, 1948)
(not including Toronto Psychiatric Hospital)

ONTARIO HOSPITALS	Bed capacity	Number of patients in hospital	Excess of patients	Percentage of overcrowding
Brockville	750	1,069	319	42.5
Cobourg	320	514	194	60.6
Fort William	125	121	-	-
Hamilton	1,065	1,624	559	57.5
Kingston	945	1,102	157	16.5
London	1,100	1,475	375	34.0
New Toronto	1,100	1,375	275	25.0
Penetang	450	609	159	35.3
Toronto	750	1,167	417	55.6
Whitby	1,500	1,683	183	12.2
St. Thomas	1,822	1,405	-	-
Langstaff	344	477	133	38.7
TOTAL	10,271	12,621	2,350	23.0
Orillia	1,800	2,170	370	20.5
Woodstock (Epileptic Division (T.B. Division 500) 450)	950	584) 1,178 594)	228	24.0
GRAND TOTAL	13,021	15,969	2,926	22.4

Source: Hospitals Division, Department of Health of Ontario.

TABLE B11
PATIENT POPULATION IN ONTARIO MENTAL HOSPITALS
(for year ending December 31, 1948)
(not including Toronto Psychiatric Hospital)

ONTARIO HOSPITALS	Bed Capacity	In Residence		On Probation		Boarding Out		Total Patients on books
		M	F	M	F	M	F	
Brockville	750	493	576	47	61	45	32	1,254
Cobourg	320	-	514	-	58	-	11	583
Fort William	125	121	-	7	-	-	-	128
Hamilton	1,065	809	815	67	116	8	15	1,830
Kingston	945	541	561	37	48	7	18	1,212
London	1,100	747	728	53	79	8	21	1,636
New Toronto	1,100	669	706	31	57	40	62	1,565
Penetang	450	371	238	7	5	8	-	629
Toronto	750	623	544	44	52	5	26	1,294
Whitby	1,500	798	885	80	150	35	52	2,000
St. Thomas	1,822	682	723	55	85	-	1	1,546
Langstaff	344	477	-	11	-	-	-	488
TOTAL	10,271	6,331	6,290	439	711	156	238	14,165
Orillia	1,800	1,166	1,004	91	92	11	85	2,449
Woodstock Epileptic T. B.	500 950 450	626	552	48	42	-	-	1,268
GRAND TOTAL	13,021	8,123	7,846	578	845	167	323	17,882

Source: Hospitals Division, Department of Health of Ontario.

TABLE B12

ACCOMMODATION REQUIRED IN MENTAL HOSPITALS WITH RESPECT TO PATIENTS IN RESIDENCE (AS OF END OF 1948)

(not including the Toronto Psychiatric Hospital)

(based on Standards, Mental Health Division, Department of National Health and Welfare)

	Actual Number of beds 1948	Estimated bed capacity	Number of beds required (based on population of 4,250,000) using Dominion Standards. i. e., rate of 4/1,000 general population, for mentally ill; 1.5 1,000 for mental defectives .25 1,000 for epileptics
(a) Number of beds in Mental Hospitals (exclusive of those for mental defectives and epileptics, but including those for tuberculous patients).	13,215	10,721	17,000
(b) Number of beds for mental defectives	2,170	1,800	6,375
(c) Number beds for epileptics	584	500	1,062
TOTAL	15,969	13,021	24,437

TABLE B13
PATIENTS IN RESIDENCE IN ONTARIO MENTAL HOSPITALS BY LENGTH OF STAY IN HOSPITALS, AGE AND SEX
as at October 31, 1949
(not including Toronto Psychiatric Hospital)

AGE GROUP (Years)		LENGTH OF STAY IN HOSPITAL																								TOTAL			
		Less than one year				1-2 years				3-4 years				5-9 years				10-19 years				20 years and over							
		M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T				
Under 15	57	64	121	107	76	183	67	33	100	116	106	222	5	5	10	-	-	-	-	-	-	-	352	284	636				
15-19	77	75	152	82	83	165	39	28	67	119	99	218	65	52	117	-	-	-	-	-	-	-	382	337	719				
20-24	103	79	182	92	63	154	71	78	149	108	106	214	138	86	224	4	-	4	-	4	-	4	515	412	927				
25-29	91	90	181	111	81	192	69	65	134	112	105	217	151	135	286	21	13	34	13	34	34	555	489	1,044					
30-34	77	91	168	90	104	194	70	70	140	152	133	285	190	130	320	47	45	92	45	92	45	626	573	1,199					
35-39	80	97	177	79	106	185	83	88	171	195	162	357	281	224	505	81	72	153	72	153	72	799	749	1,548					
40-44	65	80	145	98	91	189	94	86	180	157	154	311	300	273	573	99	89	188	99	89	89	813	773	1,586					
45-49	68	72	140	108	72	180	98	75	173	179	145	324	354	286	640	141	130	271	141	130	271	948	780	1,728					
50-54	72	76	148	67	63	130	63	83	146	123	133	256	286	281	567	155	177	332	155	177	332	766	813	1,579					
55-59	48	72	120	66	68	134	62	77	139	102	120	222	235	257	492	220	221	441	220	221	441	733	815	1,548					
60-64	55	62	117	66	78	144	50	53	103	89	119	208	177	226	403	195	212	407	195	212	407	632	750	1,382					
65-69	50	65	115	46	68	114	43	59	102	80	80	160	131	168	299	179	194	373	179	194	373	529	634	1,163					
70 & over	132	144	276	115	190	305	88	107	195	114	128	242	136	201	337	186	298	485	186	298	485	771	1,069	1,840					
TOTAL ALL AGES	975	1,067	2,042	1,126	1,143	2,269	897	902	1,799	1,646	1,590	3,236	2,449	2,324	4,773	1,328	1,452	2,780	1,328	1,452	2,780	8,421	8,478	16,899					

TABLE B14

LENGTH-OF-STAY PERCENTAGES IN ONTARIO MENTAL HOSPITALS BY AGE
as at October 31, 1949
(not including Toronto Psychiatric Hospital)

AGE GROUP (Years)	LENGTH OF STAY IN HOSPITAL						TOTAL
	Less than one Year	1-2 years	3-4 years	5-9 years	10-19 years	20 years and over	
PERCENTAGE							
Under 15	19.0	28.8	15.7	34.9	1.6	-	100.0
15-19	21.1	23.0	9.3	30.3	16.3	-	100.0
20-24	19.7	16.6	16.1	23.0	24.2	0.4	100.0
25-29	17.3	18.4	12.8	20.8	27.4	3.3	100.0
30-34	13.9	16.2	11.7	23.8	26.7	7.7	100.0
35-39	11.4	12.0	11.0	23.1	32.6	9.9	100.0
40-44	9.1	11.9	11.4	19.6	36.1	11.9	100.0
45-49	8.1	10.4	10.0	18.8	37.0	15.7	100.0
50-54	9.4	8.2	9.3	16.2	35.9	21.0	100.0
55-59	7.8	8.7	9.0	14.3	31.8	28.4	100.0
60-64	8.5	10.4	7.4	15.1	29.2	29.4	100.0
65-69	9.8	9.8	8.8	13.8	25.7	32.1	100.0
70 & over	14.9	16.6	10.6	13.2	18.3	26.4	100.0
TOTAL ALL AGES	12.1	13.4	10.6	19.1	28.3	16.5	100.0

TABLE B15
RATIO OF PHYSICIANS TO PATIENT POPULATION IN ONTARIO MENTAL HOSPITALS
(as at December 1948)
(not including Toronto Psychiatric Hospital)

ONTARIO HOSPITALS	Patient Popula- tion	No. of physicians on ward duty Full Time Part Time	Physicians attached, not on ward duty	Superin- tendents	Total number of Physicians	Ratio of patients to ward physicians
Brockville	1, 069	3	1 (M. H. Clinic)	1	5	356
Cobourg	514	1		1 (also on wd. duty)	2	257
Fort William	121	1 (Supt. also)		1 supt. - wd. phys.	1	121
Hamilton	1, 654	6	1 (M. H. Clinic)	1	8	275
Kingston	1, 102	4	1 (M. H. Clinic)	1	7	275
London	1, 475	5	1 (M. H. Clinic)	1	8	295
New Toronto	1, 375	5		1	6	275
Penetang	609	1		1 (also on wd. duty)	2	304
Toronto	1, 167	5		1	6	233
Whitby	1, 683	6		1	7	280
St. Thomas	1, 405	5		1	6	281
Langstaff	477	1		1 supt. - wd. phys.	1	477
TOTAL	12, 621	43	4	12	59	298
Orillia	2, 170	4		1	5	542
Woodstock	1, 178	6	1 travelling chest clinic	2	9	200
GRAND TOTAL	15, 969	53	5	15	73	301

Source: Hospitals Division, Department of Health of Ontario.

Chart 5 shows clearly that most physicians who resigned from the service were being paid less than \$3,400 a year when they left. And Chart 6 reveals that at the time of this survey the largest salary group among doctors in the mental hospital service was that from \$4,700 to \$5,500 per year.

The situation with respect to psychiatrists in the Ontario Hospitals may be summed up by saying that about one-half the number are now employed who are required. There has been a marked exodus from the service during the war and in the ensuing years. It is obvious that the low salary schedule is one factor in producing this exodus.

Tables B16, B17 and B18 portray the situation with regard to other personnel. There is a shortage of graduate registered nurses which is considered to be a reflection of the general nursing shortage, not peculiar to the government hospitals. These tables show inadequate employment of psychologists and social service workers.

A glance at Table B19 gives a picture of the expenditures for the mental hospitals for the year ending March 31, 1949. It will be seen that it cost the province \$1.84 to maintain a patient in a mental hospital for one day.

These figures may be compared with the cost of maintaining a patient in a general hospital during this same period. In the public general hospitals during the year 1948 it cost on an average \$7.55 per day to maintain a patient.

These low maintenance costs show that the mental hospitals are operated with due regard for economy. On the other hand, it is reasonable to assume that this same regard for economy has resulted in insufficient accommodation, overcrowding and insufficient staff.

When hospitals become overcrowded and understaffed, certain results are inevitable.

One obvious result is that patients requiring hospitalization cannot be admitted. Thus, there is a waiting list of over 1,500 mentally defective children who should be admitted to an institution similar to Orillia. This is only a fraction of the number requiring admission as many people do not place their name on the waiting list after being informed that there is no possibility of admission before a lapse of at least six months.

Some of the mentally ill people appear in the magistrates' courts. Because of the lack of hospital accommodation, they are held in jails while their case is being settled. Even after the magistrate has determined that admission to a mental hospital is necessary, many of these people are held in jails for an unduly long period waiting their turn to be admitted to hospital. The detrimental effect of this procedure requires no elaboration.

Another inevitable result is that patients who are admitted to hospital cannot receive adequate treatment. The modern mental hospital should be equipped to treat any organic illness from which patients may be suffering and in addition the hospital should be able to provide the recognized specialized forms of treatment for mentally ill patients including psychotherapy, physiotherapy, occupational therapy, insulin treatment and electroconvulsive therapy,

The inadequacy of the treatment facilities is illustrated by a reference to the limited facilities for providing insulin treatment. This is a form of treatment which has considerable application in the treatment of patients diagnosed as suffering from schizophrenia. In the year 1948 there were 663 patients admitted to mental hospitals in Ontario with this condition. These were patients who had no previous admission to hospital. An additional 290 were admitted suffering from this form of illness. These were patients who had been in a mental hospital on some previous occasion. On a conservative estimate 50 per cent of the 663 first admissions for schizophrenia would benefit from insulin treatment.

This form of treatment, however, can be given at only three out of the 15 hospitals, namely, -

Toronto Psychiatric Hospital (six patients)
Ontario Hospital New Toronto (12 beds for women)
Ontario Hospital London (six beds for women, six beds for men).

Survey of Mental Facilities in General Hospitals

At the end of 1948, there were 146 public general hospitals in Ontario. Of these only three provide any separated accommodation for patients requiring psychiatric treatment.

The Ottawa Civic Hospital provides nine beds for psychiatric patients. The facilities are far from ideal.

The Victoria Hospital, London, has a psychiatric unit of 13 beds for female patients. A psychiatrist supplied by the Department of Health of Ontario directs the unit.

In July 1949, the Toronto General Hospital (Wellesley division) established a 32-bed unit for psychiatric patients staffed by two psychiatrists provided through the federal health grant to the Province of Ontario.

The Kingston General Hospital accommodates a variable number of psychiatric patients on the medical wards.

Similarly, a variable number of patients are treated on the medical wards of the Toronto General Hospital, Toronto Western Hospital, St. Michael's Hospital, Toronto, and St. Joseph's Hospital, Toronto.

ANALYSIS of MEDICAL STAFF ONTARIO HOSPITAL SERVICE

CHART B1

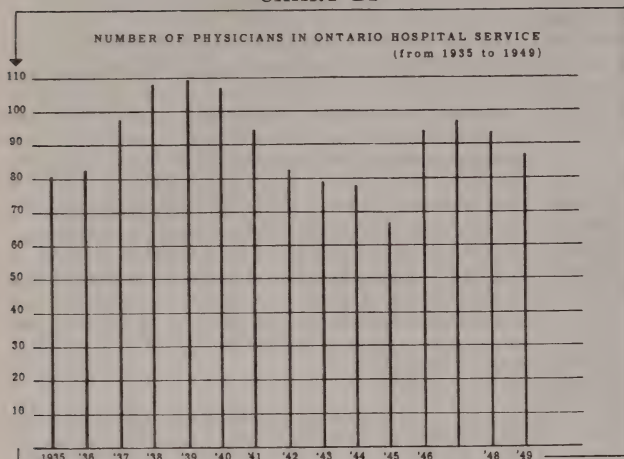


CHART B2

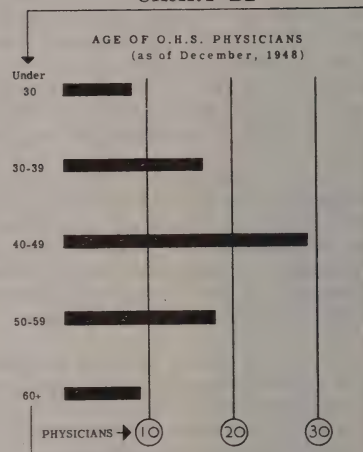


CHART B3

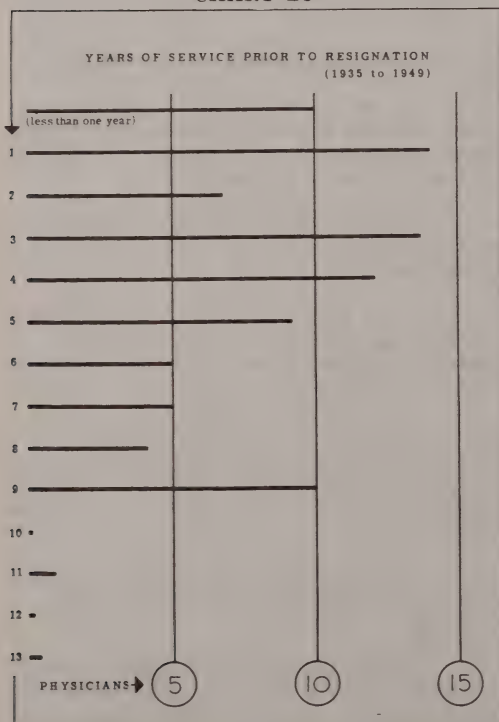


CHART B4

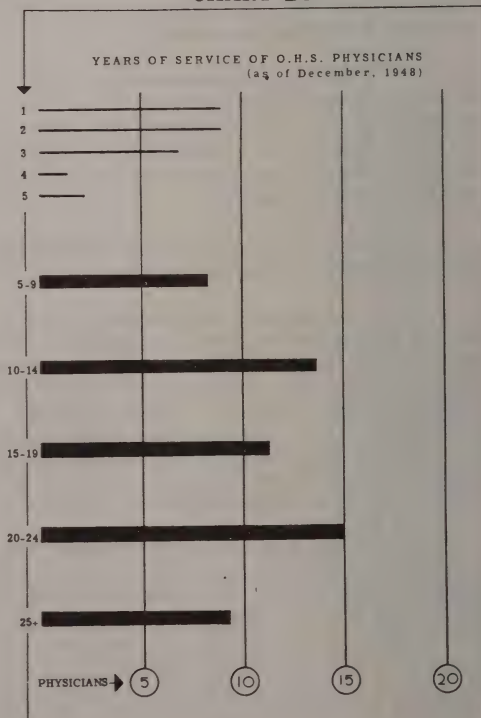


CHART B5

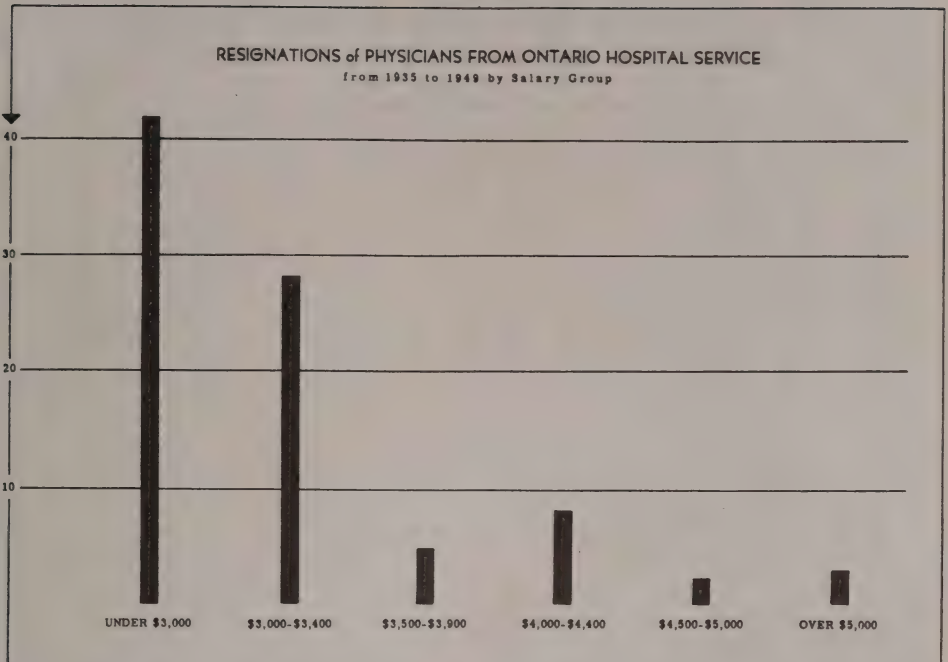


CHART B6

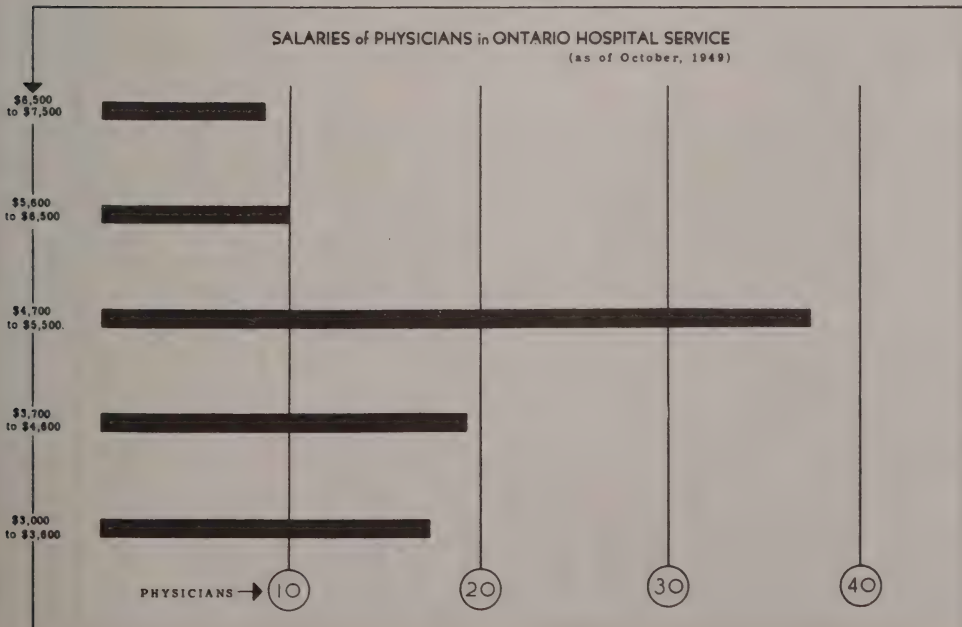


TABLE B16
NURSING PERSONNEL IN ONTARIO MENTAL HOSPITALS, (including Attendants)
as of December 31, 1948

ONTARIO HOSPITALS	Patient Popula- tion	Nurses not on ward duty	Nursing Personnel on Ward Duty				Atten- dants	Total	
			Nurses		Affiliates	Ward Aides			
			Full time	Part time		Full time	Part time.		
Brockville	1,069	3	32	7	25	38	4	79	188
Cobourg	514	1	13	-	-	22	-	-	36
Fort William	121	-	4	-	-	1	-	26	31
Hamilton	1,654	3	31	3	13	72	1	117	240
Kingston	1,102	4	35	20	22	41	30	85	237
London	1,475	4	35	22	6	66	26	118	277
New Toronto	1,375	4	36	6	11	58	1	98	214
Penetang	609	1	7	-	-	27	-	88	123
Toronto	1,167	3	38	4	-	46	-	89	180
Whitby	1,683	2	27	15	26	79	1	95	245
St. Thomas	1,405	2	27	3	-	67	6	115	220
Langstaff	477	-	-	-	-	-	-	50	50
TOTAL	12,621	27	285	80	103	617	69	960	2,041
Orillia	2,170	2	14	-	-	115	-	132	263
(Epileptic Woodstock Division (T. B. Division	584 594	2	45	1	-	80	1	133	262
GRAND TOTAL	15,969	31	344	81	103	712	70	1,225	2,566

Source: Hospitals Division, Department of Health of Ontario.

TABLE B17

RATIO OF NURSING PERSONNEL TO PATIENT POPULATION IN ONTARIO HOSPITALS

as of December 31, 1948.

ONTARIO HOSPITALS	Patient Population	Number of Nursing Personnel (including attendants)	Ratio Patients per Nursing Personnel (incl. attendants)	Ratio of Patients to Graduate Nurse (full time)
Brockville	1, 069	188	5.6	33.6
Cobourg	514	36	14.3 (no att- endants)	39.5
Fort William	121	31	4.0	30.0
Hamilton	1, 654	240	6.89	53.3
Kingston	1, 102	237	4.65	31.5
London	1, 475	277	5.36	42.1
New Toronto	1, 375	214	6.42	38.2
Penetang	609	123	4.95	87.0
Toronto	1, 167	180	6.48	30.9
Whitby	1, 683	245	6.87	62.3
St. Thomas	1, 405	220	6.38	52.0
Langstaff	477	50	9.54	-
TOTAL	12, 621	2, 041	6.18	44.3
Orillia	2, 170	263	8.21	155.0
Woodstock (Epileptic Division (T. B. Division	564 594	262	4.49	26.2
GRAND TOTAL	15, 969	2, 566	6.22	46.4

Source: Hospitals Division, Department of Health of Ontario.

TABLE B18

SPECIAL PERSONNEL (OTHER THAN PHYSICIANS AND NURSING PERSONNEL) IN ONTARIO MENTAL HOSPITALS

as of December 31, 1948

ONTARIO HOSPITALS	Population	Dentists	Psycho- logists	Social Service Workers	O. T.	X-Ray Techni- cians	Lab. Techni- cians	Teachers	P. T. Instructors
Brockville	1,069	1	1	-	4	1	-	-	-
Cobourg	514	-	-	1	1	-	-	-	-
Fort William	121	-	-	-	-	-	-	-	-
Hamilton	1,654	1	2	1	4	-	-	-	-
Kingston	1,102	1	1	1	4	-	-	-	1
London	1,475	1	1	1	4	1	1	-	-
New Toronto	1,375	1	-	1	6	1	1	-	-
Penetang	609	-	-	-	-	-	-	-	-
Toronto	1,167	1	1	1	6	-	1	-	-
Whitby	1,683	1	-	1	5	-	-	-	1
St. Thomas	1,405	1	-	1	6	1	1	-	-
Langstaff	477	-	-	-	-	-	-	-	-
TOTAL	12,621	8	6	8	40	4	4	0	2
Orillia	2,170	1	1	1	-	2	-	8	1
Woodstock (Epileptic Division (T. B. Division)	584 594	1	1	-	5	4	5	-	-
GRAND TOTAL	15,969	10	8	9	45	10	9	8	3

Source: Hospitals Division, Department of Health of Ontario.

TABLE B19

MAINTENANCE EXPENDITURES IN ONTARIO MENTAL HOSPITALS FOR FISCAL YEAR ENDED MARCH 31, 1949
(Not including Toronto Psychiatric Hospital)

Items	Total All Hospitals	Average Cost per Patient per Day in All Hospitals	Average Cost per Patient per Day at Orillia	Average Cost per Patient per Day at Woodstock
Medicines*	\$219,457.80	\$.0363	\$.0228	\$.0586
Provisions	1,922,958.64	.3184	.2911	.3450
Boarded-out patients	167,018.92	.0277	.0355	-
Fuel, light, water	734,316.78	.1216	.1056	.1274
Clothing	284,903.92	.0472	.0630	.0378
Laundry & cleaning	170,238.87	.0282	.0264	.0307
Furniture & furnishings	228,517.98	.0378	.0425	.0302
Office expense	39,666.28	.0066	.0039	.0090
Allowances**	281,774.08	.0467	.0391	.0274
Feed, fodder, livestock & vehicles	315,155.38	.0522	.0501	.0374
Farm expense	90,448.26	.0150	.0127	.0242
Contingencies	109,435.93	.0181	.0082	.0161
Salaries	6,564,710.68	1.0870	.8243	1.6172
Total gross expenditure	\$11,128,603.52	\$1.8428	\$1.5252	\$2.3610
Less recoveries***	2,696,002.96	.4464	.2866	.5217
Total net cost	\$8,432,600.56	\$1.3964	\$1.2386	\$1.8393
Repairs to buildings	195,566.30	.0324	.0193	.0348
Grand Total	\$8,628,166.86	\$1.4288	\$1.2579	\$1.8741

* Medicines include tobacco.

** Allowances include employees' meals, employees' uniforms, and employees' other allowances.

*** Recoveries include farm recovery, miscellaneous receipts, perquisites and patients' maintenance.

SOURCE: 82nd Annual Report of Hospitals Division, Department of Health of Ontario.

This brief statement shows that it is not the usual practice for general hospitals to provide accommodation for mentally ill patients.

Architectural plans for units of 20 to 50 beds were secured by the committee from the United States Public Health Service, and the Department of National Health and Welfare.

A representative of the committee visited a number of centres in the United States where such units are being developed, namely, the Strong Memorial Hospital, Rochester, N. Y., Massachusetts General Hospital, Boston, Mount Sinai Hospital, New York City and the Payne Whitney Psychiatric Clinic, New York City. The information thus secured was of assistance to the committee in assessing the value of psychiatric beds in general hospitals and procedures for their establishment and administration.

The committee recommends the development of psychiatric units in public general hospitals.

Private Mental Hospitals

Private mental hospitals are licensed by the Department of Health of Ontario under the Private Sanatoria Act.

The institutions now licensed are Home-wood Sanatorium (225 beds), Shadowbrook Health Foundation (for alcoholic patients, 30 beds) and Bethesda Hospital (25 beds).

Conclusions

From the information adduced in this part of the report, it is obvious that more mental hospital beds are required in Ontario. The committee estimates that 11,416 beds should be built to serve the existing population, plus 574 beds each year for the yearly increase in population.

One survey in the United States stresses the building of mental hospitals in large cities to attract greater numbers of properly qualified psychiatric personnel. In Ontario, this must be balanced against the need to make the hospital accessible to patients and their relatives and friends. A reasonable compromise is to assign a high priority to the needs of the three teaching hospitals: Toronto Psychiatric Hospital, the Ontario Hospital London, and the Ontario Hospital Kingston. The Toronto Psychiatric Hospital is in a position to attract qualified personnel and it can handle a large volume of treatments because the majority of its patients do not require prolonged hospitalization. It is a key teaching centre. Yet this hospital has insufficient bed accommodation and its out-patient department is about to be ejected from its present quarters.

The committee recommends that 53 psychiatrists be added to the staffs of the Ontario mental hospitals. In addition, one psychiatrist should be employed for each 150 beds that are added to the hospital accommodation. This will necessitate extension of the training facilities, It will also necessitate an improved salary scale. The committee makes no recommendation with regard to the specific salaries necessary to attract psychiatrists to the staff of the Ontario mental hospitals. Attention should be drawn, however, to the fact that the federal government is advertising for a psychiatrist without specialist certification at a commencing salary of \$5,200 per year. The Ontario government is paying less than \$5,000 per year to psychiatrists with specialist certification and several years' experience.

In solving the problem of medical personnel, attention should also be given to the employment of practising psychiatrists on a part-time consulting basis. This system, which is used in D. V. A. hospitals and in general hospitals, could be used much more extensively in provincial mental hospitals.

The employment of additional psychologists and psychiatric social workers is recommended by the committee.

The committee recommends that the development of psychiatric units in general hospitals be encouraged and specifically that the Province of Ontario should provide the following financial assistance, -

- (i) a capital or building grant of \$1,500 per bed (instead of the usual \$1,000 per bed for general hospitals) to be matched by a similar grant from the federal government;
- (ii) that the maintenance grant for indigent patients in such units be fixed at an amount greater than the general maintenance grant, the amount to be determined when the cost of operating such units is ascertained;
- (iii) that general hospitals providing accommodation for out-patient community clinics be granted the financial assistance described in Chapter II of the report.

The committee concludes its recommendations respecting mental hospitals by stressing the need for integrated planning of the mental hospital service together with the other elements necessary for a good mental health service, particularly, the university facilities for training personnel and the development of community clinics.

TABLE B20

DEATHS IN ONTARIO MENTAL HOSPITALS 1948, BY DURATION OF HOSPITAL LIFE

(not including Toronto Psychiatric Hospital)

No. of Years' Stay	No. of Deaths	Percent of Deaths	No. of Months Stay	No. of Deaths	Percent of Deaths
over 20 years	107	10.39	Under 1 month	176	17.09
15 - 19 "	50	4.85	1 - 3 "	129	12.52
13 - 14 "	29	2.82	4 - 7 "	89	8.64
11 - 12 "	36	3.50	8 - 11 "	60	5.81
9 - 10 "	29	2.82			
7 - 8 "	49	4.76			
5 - 6 "	48	4.66			
3 - 4 "	76	7.38			
1 - 2 "	152	14.76			
Under 1 year	454	44.06			
TOTAL	1,030	100.0		454	44.06

TABLE B21

DEATHS IN ONTARIO MENTAL HOSPITALS BY AGE GROUPS FOR YEAR 1948

(not including Toronto Psychiatric Hospital)

Age Groups	Patients in residence at Dec. 31, 1948	Percent of Total Patients	Deaths During 1948	Percent of Total Deaths
70 years & over	1,760	10.69	515	50.00
65 - 69 years	1,101	6.69	120	11.65
60 - 64 "	1,283	7.80	68	6.60
55 - 59 "	1,485	9.02	70	6.80
50 - 54 "	1,521	9.24	69	6.70
45 - 49 "	1,741	10.58	29	2.82
40 - 44 "	1,581	9.60	31	3.00
35 - 39 "	1,494	9.08	24	2.33
30 - 34 "	1,235	7.50	32	3.11
25 - 29 "	1,068	6.49	18	1.75
20 - 24 "	844	5.13	18	1.75
15 - 19 "	716	4.35	13	1.26
under 15 "	630	3.83	23	2.23
TOTALS	16,459	100.00	1,030	100.00

CHAPTER IV

MENTAL HEALTH FACILITIES FOR THE COURTS

This chapter contains a survey of the mental health facilities for juvenile and family courts and magistrates' courts, and the survey committee's recommendations for the improvement and extension of these facilities.

Juvenile and Family Courts.

For the purpose of securing information with respect to mental health facilities in juvenile and family courts, and to obtain the opinion of the judges, a letter was sent out to all such courts in Ontario. Thirty-three letters were sent out and 19 replies were received.

An analysis of the replies shows that:

(a) Ten courts are completely satisfied with the services available. Nine of these are provided with mental health facilities primarily through travelling mental health clinics and assisted by Ontario Hospitals or local units sufficient for their needs. These courts are located in the areas of Oxford, Wellington, Halton, Stormont-Glengarry-Dundas, Kent (Chatham), Brant (and Brantford), Wentworth (and Hamilton), Middlesex (and London), Thunder Bay. The tenth court at Toronto has a permanent mental health service located in its own setting, which provides a satisfactory arrangement.

(b) Five courts have mental health facilities but the judges considered that there should be considerable extension of these services. Here, too, the services are provided by travelling mental health clinics. These courts are located in the areas of Haldimand, Carleton, Windsor-Walkerville-Ford, Norfolk and Waterloo.

(c) Four courts have no (or practically no) mental health facilities. These are located in the areas of Temiskaming, Grey (and Owen Sound), Dufferin and Peterborough.

The judges, almost without exception, stressed the need for an adequate mental health service. Many felt that the function of the court was handicapped by the lack of a consultation service. Those who had not such service or whose service was considered inadequate consistently stressed the importance of establishing adequate facilities. Several, such as the courts at Windsor, Peterborough, Carleton (Ottawa), suggested that the populations they served warranted the establishment of permanent psychiatric clinics. Others felt that a psychiatric clinic permanently established in a large centre close by would facilitate and improve services. Still others expressed the opinion

that their courts could be served to greater advantage if the amount of the time given by the visiting clinics could be increased.

It would be fair to assume that courts in other areas (from which replies were not received) which are not served by travelling mental health clinics, or not adjacent to Ontario Hospitals, have no mental health facilities.

Magistrates' Courts

In the survey of mental health facilities for the magistrates' courts, the committee was assisted by the Ontario Magistrates' Association. Upon the request of the committee, the Association submitted a questionnaire to all the magistrates of the province in order to obtain factual information as to the facilities available in each magisterial district.

The following is a summary of the replies which were received. The summary was prepared by the representative of the Magistrates' Association at the request of this committee.

"At your request I submitted a questionnaire to all the magistrates of the province for the information requested by you in your letter of April 1st last.

"I have received numerous replies and they seem to be divided into two classes. There are a large number of magisterial districts in which mental hospitals and clinics are available. In other districts there are no hospital or clinic facilities; neither are there any resident psychiatrists.

"The result is that in this latter class all examinations must be made in the local gaol. The patient is required to remain in the gaol pending examination by local physicians and transfer to a mental hospital.

"Formerly it was possible for the magistrate to remand a suspected mentally ill person to an Ontario Hospital for a period of 60 days for mental observation. This practice, however, was discontinued in October, 1939, on instructions from the Attorney-General's Department.

"In the Sudbury district, in 1947, we had 68 mental patients in the gaol; in 1938, 61. It has been my experience that patients com-

mitted to an Ontario Hospital sometimes are not transferred to a mental institution for a considerable length of time. One patient was held in the Sudbury gaol from February 26th to May 3rd of this year (1948).

"These patients require extra care and attention in the gaols and the staff is not qualified to take care of them. The mentally ill people must be kept with criminals serving sentences. They cannot be segregated, and of course they frequently disturb the other inmates of the institution. There is also the danger of a mentally ill person inflicting injury on himself, and so he must be kept under constant observation. In some instances the mentally ill persons require medical attention, and this service cannot be obtained in the gaol 24 hours a day, particularly where, as in a great number of cases, the gaol physician is a part time employee.

"This situation obtains in Sudbury and District, District of Algoma, County of Simcoe, District of Temiskaming, Rainy River District, Prescott and Russell County (Vankleek Hill) and Peterborough County.

"On the other hand, the practice in courts adjacent to Ontario mental hospitals seems to be uniform and the services and facilities of these hospitals are available to the courts. This applies at Kingston, St. Thomas, Owen Sound, Chatham, Ottawa, Kitchener, Welland, City of Toronto, Windsor, Woodstock, Fort William and Hamilton".

It is apparent from this survey that an improvement and extension of the mental health facilities for the magistrates' courts are needed, with the following objects in view, -

(a) to eliminate or at least to shorten the time spent by mentally ill people in jails;

(b) to provide a diagnostic service in order that a magistrate may secure an expert opinion in a case where the person appearing before the magistrate is suspected of being mentally ill or mentally defective.

There are two types of service which are required for the magistrates' courts.

The first of these services is an arrangement which authorizes a magistrate to commit a person who requires a mental examination to a mental hospital for a short period of observation. Legislative authority for this procedure is contained in section 35 of the Mental Hospitals Act (authorizing a magistrate to commit such a person in an Ontario Hospital for observation), and in section 9 of the Psychiatric Hospitals Act (authorizing a magistrate to commit such a person to the Toronto Psychiatric Hospital). The difficulty in implementing

this provision is the shortage of hospital accommodation.

This is illustrated by a reference to Table B22. The table shows, for example, that in the year 1939, 271 persons were committed to Ontario mental hospitals under this procedure. The number shows a reduction until the year 1945, when the number was reduced to 52 persons. The reduction in these cases is due to the lack of accommodation in the Ontario Hospitals.

The same situation obtains at the Toronto Psychiatric Hospital as shown in Table B23. A glance at this table will show that the number of cases referred to the Toronto Psychiatric Hospital by the magistrates' courts reached a peak of 347 in the year 1932. The number fell to 42 in the year 1948. This reduction is caused by increased demands upon the limited accommodation in the Toronto Psychiatric Hospital and the consequent necessity of using the available beds for other types of emergency cases.

The second type of service for the magistrates' courts has not been developed in Ontario. This is a service whereby a magistrate may refer a person to an out-patient clinic for a psychiatric opinion. This type of service is developing in the United States. Table B24 is a summary of the facilities provided by seven such clinics in various parts of the United States. This table is reproduced with the permission of the The American Journal of Psychiatry from an article by Manfred S. Guttmacher, M.D. (F.A.P.A.), of Baltimore (issue of June, 1950).

Three representatives of the committee visited one of these clinics in the United States. The clinic which was visited is the one located in Detroit (the third one shown in Table B24) and directed by Dr. Alan Canty. Judge Murphy, of the Michigan Bench, was also interviewed, and he stated that it would greatly diminish the efficiency of the courts if the services of the clinic were not available. Of the approximately 22,000 cases appearing before the courts, about 10 per cent or 2,200 each year, are referred to the clinic.

The committee is of the opinion that where a community clinic is established as recommended in Chapter I, such a clinic could include in its functions the examination of cases referred to it by the magistrates' court in that locality. In larger centres such as Toronto, there would be a sufficient volume of cases to warrant the establishment of a specialized clinic for these persons.

Where such a clinic is established, it will undoubtedly reduce the number of cases which are admitted to a mental hospital for observation, although the latter procedure would still be necessary for cases requiring prolonged and intensive observation and examination.

Recommendations.

The committee recommends that, -

(a) mental health services be provided for all juvenile and family courts by the establishment of permanent clinics in the larger centres and by the establishment of the community clinics recommended in Chapter I;

(b) the improvement and extension of services for the magistrates' courts by the provision of adequate mental hospital accommodation (as recommended in Chapter III) and by the establishment of community clinics (as recommended in Chapter I).

TABLE B22

The number of first admissions and readmissions to Ontario mental hospitals by order of Magistrate (Section 35) during the period April 1, 1938, to December 1, 1947, are set out in the following table.

ADMISSIONS BY ORDER OF MAGISTRATE (SECTION 35) ONTARIO MENTAL HOSPITALS

1939 to 1947

YEAR	First Admissions			Readmissions			TOTAL		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
1939	171	56	227	35	9	44	206	65	271
1940	109	15	124	23	2	25	132	17	149
1941	71	9	80	18	3	21	89	12	101
1942	58	5	63	5	1	6	63	6	69
1943	32	4	36	4	1	5	36	5	41
1944	44	3	47	8	1	9	52	4	56
1945	39	5	44	8	-	8	47	5	52
1946	45	4	49	7	1	8	52	5	57
1947	55	11	66	9	3	12	64	14	78
1948*	66	8	74	11	7	18	77	15	92
TOTAL	690	120	810	128	28	156	818	148	966

* Nine-month period ending December 31, others are twelve months ending March 31st.

It is noted that the ratio of male to female admissions under Section 35 is about 6 to 1.

It is also noted that the ratio of first admissions to readmissions among cases in this group is about $5\frac{1}{2}$ to 1 for both sexes.

TABLE B23

TORONTO PSYCHIATRIC HOSPITAL-CASES ADMITTED BY MAGISTRATES' WARRANTS

1928-1948

Year	Male	Female	TOTAL	Year	Male	Female	TOTAL
1928	105	125	230	1938	127	70	197
1929	129	130	259	1939	114	58	172
1930	146	157	303	1940	98	54	152
1931	170	148	318	1941	57	72	129
1932	211	136	347	1942	73	78	151
1933	123	85	208	1943	58	54	112
1934	134	73	207	1944	78	40	118
1935	114	58	172	1945	78	31	109
1936	137	63	200	1946	79	25	104
1937	151	73	224	1947	72	28	100
				1948	29	13	42
TOTAL							3,854

TABLE B24
COURT PSYCHIATRIC FACILITIES
--- IN THE UNITED STATES ---

Name, Population, Date Estab.	Location	Author. Act	Profess. Pers. Salaries	Nonprofess. Pers. Salaries	Annual Case Load, Types Service	Annual Budget	Time of Exam.
Chicago, 1914 3,396,808 Psychiatric Institute of Municipal Court	Court House House of Correct. (Research Unit)	No statutory basis	Psychiatrists: Director (full time), \$7,500 4 psychiat. (part time), \$3,000-\$5,000 1 psychol. (part time), \$1,800 2 psychiat. social workers, \$4,000 2 soc. workers, \$2,600- \$3,000	2 secty.-clinic managers, \$3,000 2 stenog., \$2,600-\$2,800 Clerk I. B. M., \$2,700 1 switchboard oper., \$2,200 1 woman bailiff, \$2,500 2 police, \$3,100	Psychiat. opin., 4,000 Fitness to drive, ±50 Some treatment cases No juveniles Total, 4,100	\$77,910	Pretrial, 15% Posttrial, 85%
Baltimore 1921 859,100 Medical Office of Supreme Bench	Court House and Jail Offices	Chap. 120. Acts A1920 Maryland	1 psychiat. (part time), \$5,000 1 psychol. (full time), \$3,600 1 hematologist (part time), \$700 Soc. workers, none	1 stenog.- secretary, \$2,500	Psychiat. opin., 180 Physic. ability to work, 15 Blood grouping Bastardy, 95 Fitness to drive, 8 Credibility as wit- ness, 5 Juveniles, rare Total, 300	\$12,000	Pretrial, 50% Posttrial, 50%
Detroit 1921 1,623,452 Psychopathic Clinic of Recorders Court	Municipal Court Building	Act 369 Pub. Act 1919, Sect. 16520 (Mich.)	Exec. direc. psychol. \$10,416 (full time) 1 chief psychiatrist, \$7,615-\$8,396 (full time) 1 assit. psychiatrist, \$6,753-\$7,581 (full time) 1 head psychologist, \$4,977-\$5,598 (full time) 4 senior psychol. \$4,370-\$4,847 (full time) 3 jun. psychol., \$3,894-\$4,212 (full time) 1 physician (part time), \$2,395	2 sect. med. stenog., \$3,670-\$4,417 4 sen. med. stenog., \$3,007-\$3,352 3 jun. med. stenog., \$2,743-\$2,875	Psychiat. opin., 2,250 Fitness to drive, 425 Miscellaneous, 30 Juveniles, rare Total, 2,700	\$104,635	Pretrial, 8% Posttrial, 92%
Cleveland 1925 878,336 Psychiatric Clinic of Municipal and Criminal Courts	Criminal Court Building	General Code of Ohio 1541	Director-psychiat. (part time), \$7,200 1 psychiat. (part time), \$5,000 2 psychol. (full time), \$3,600-\$4,300 2 psychiat. soc. workers, \$3,750-\$4,400	2 secretaries, \$2,500-\$3,000	Psychiat. opin., 650 Physic. ability to work, 5 Fitness to drive, 20 No juvenile cases Total, 675	\$33,500	Pretrial, 10% Posttrial, 90%
Chicago 1931 3,396,803 Clinic of Criminal Court of Cook County	Criminal Court Building	Ill. Statute Estab. Bureau Public Welfare in Counties Over 500,000 With Medical Service	Director-psychiat., 15 hours, \$7,500 1 assoc. psychiat., 15 hours, \$3,900 1 psychol., 15 hours \$1,716 1 soc. worker (full time), \$3,000	1 clinic. secty., \$2,820 1 med. stenog., \$2,400 1 clerk typist, \$2,100	Psychiat. opin., re.: (A) Able to go to trial, (B) Mental disease present, 450 Med. emergencies in courthouse No juvenile cases Total, 500	\$23,000	Pretrial, 95% Posttrial, 5%
New York 1932 Manhattan County 1,889,424 Psychiat. Clinic Court Genl. Sessions	Criminal Court Building	Section 939 Code of Crim. Proceed. N. Y. State	4 Psychiat. (full time), \$3,200-\$6,450 2 psychol. (full time), \$3,000-\$3,500 Soc. workers, none	2 clinic clerks, \$2,000-\$3,100 2 stenogs., \$2,000-\$3,100	Psychiat. opin., 2,537 Therapy, few No juvenile cases Total, 1,575	\$36,000	Pretrial, 15% Posttrial, 65% All cases found guilty
Pittsburgh 1937 671,659 Behavior Clinic, Court Quarter Sessions Allegheny County	City- County Building and Jail Offices	No Statute, Estab. by City Com- missioners as Part of Probation Dept.	Director-psychiat. (half time), \$4,800 1 psychiat. (full time), \$7,200 1 asst. psychiat. (part time), \$4,200 1 psychol., \$5,000 (full time) 2 psychiat. soc. workers, \$2,800	1 sect. statist., \$5,000 2 stenogs., \$2,500-\$3,000	Psychiat. opin., 575 No juvenile cases Total, 575	\$36,700	Pretrial chiefly

TABLE B24 (Cont.)
COURT PSYCHIATRIC FACILITIES
--- IN THE UNITED STATES ---

Psychiat. Referral Sources	Personal Testimony	Admissi- bility of report	Types Psych. Report	Observ. Facility	Clinical Tests Employed	Psychological Tests	Teaching Research, Etc.
95% Judges Munic. Court ±5% from 101 community agencies	400 cases	Nearly always admitted	Brief report with recom- mend. in nearly all Full psychiat. report to treatment agencies	No hospital facility	Blood tests- syph., all fe- male sex cases — some males Spinal fluid, ±12 per ann. E. E. G., ±100 per ann.	Wechsler, T. A. T., Rorschach sev- eral a day Also aptitude, achievement, reading tests, visual memory drawings	Teaching in univ. and psycho- anal. institute, Psychol. intern- ships, grad. students soc. work, med. clerkships All psychologists are doing re- search
Judge, 57% Jail, 15% Defense counsel, 15% States atty., 6% Prob. dept., 3% Others, 2%	15 cases	Nearly always admitted	Full 87% Brief, 13% Specific recom- mend, re dispos., 95%	Jail hospital not adequate	Blood tests- syph., all cases under age 50 Spinal fluid, 6 X-ray skull, 4 E. E. G., 5	Psychometric test (Otis, Wechsler, Binet), 100% Rorschach, 90% Free hand draw- ing, 90% One or more other tests (T. A. T.; four picture test; Bender; M. M. P. I.; word assoc. tests), 50%	Psychiat. gives 15 clinics, V. A. hosp., 4 lect. med. school, 2 in univ. occas. in law school Psychol. carrying out research on new test
Crim. court div. judges, 95% Prob., 2.5% Jail, 2.5% Traffic div. judges, 70% License bureau, state police, et al., 30%	225 sanity commission cases	Only when sanity commiss. appointed	Restrict. to sanity-insan. issue, 8% Full psych. study with specific recom- mend., 92%	Psycho- pathic ward receiving hospital	Blood tests- syph., all cases Spinal fluid, 250 E. E. G., 50	Otis, 100% Wechsler or Ter- man if Otis I. Q. less than 70 Rorschach, 100 Bender, 50	2 psychol. teach psychol. sociol. and criminol. in university 1 psychol. in police dept. school No student or interne train.
Judges, 97% Probate, 3%	40	Posttrial cases	Full psychiat. study, 98% Brief psych. study, 2% Genl. recom. re dispos., 75% Specif. recom. re dispos., 20%	Jail hospital	Blood tests- syph., 100 Spinal fluid, 3 E. E. G., 7	Wechsler, 600 Binet, 25 Rorschach, 10 T. A. T., 40 Szondi, 10	Casual lectures 4 or 5 per ann. One interne in psychology
Judges, 98% Jail, 2%	75	All admitted	Full psychiat. study, 98% Recommend. re dispos., none	None	Blood tests- syph., all Gonoc. smear, all E. E. G., 5	Wechsler, 450 Rorschach, few T. A. T., few	No interne training
Judges, 98% Prob. cases from other cities, 2 %	Very few	Generally not admitted as evidence	Full psych. study, 95% Recommend. re dispos. made in only psychotics and defectives	Inpatients at Bellevue Hospital	None in clinic	Wechsler, ±1500 Rorschach, ±600 T. A. T., ± 600	One psychiat. in- structor in med school and lecturer in proba- tion school Minimal use of clinic for stu- dent training
Judges almost entirely Dist. atty. may refer through judges	Rare, few murder cases	Not used as evidence	Full psychiat. study, 100% Summary sent court Specific recom- mend. re dispos. in some cases	Jail hospital	Blood tests- syph., nearly all Spinal fluid, a few E. E. G., a few	Wechsler, 575 Binet, some Rorschach, ±275 T. A. T., ±125 Rozenzweig, some Babcock Levy, ±125	Casual lectures to clubs No interne training

CHAPTER V

MENTAL HEALTH SERVICES FOR SCHOOLS

A few municipalities maintain mental health clinics to which school children may be referred. The only additional services available are those provided by the four travelling clinics operated by the Ontario Department of Health. Services of these clinics are limited to the localities in which the clinics are located (as described in Chapter I).

It is apparent that only a few of the larger cities have a sufficient concentration of school population to justify the establishment of a specialized clinic service for the school population.

It is the belief of the committee that the establishment of community mental health clinics as recommended in Chapter I would provide a reasonable mental health service for the school population of the province. The larger municipalities should be encouraged to continue the development of mental health services for the schools.

It is apparent that the establishment of community clinics (see Chapter I) would provide a reasonable mental health service for auxiliary classes in those areas which are without any services, and would augment the facilities which are now operating on a limited scale in some parts of the province.

Another aspect of this subject is the establishment and maintenance of experience in mental health for teachers, especially for teachers in training. The committee is informed that the Ontario College of Education is establishing such a service, to be

financed through the federal mental health grant to the Province of Ontario, to be administered by the University of Toronto.

A research study is being conducted by the University of Toronto, in the department of psychiatry, known as the "Forest Hill Village Project". This is an intensive sociological study, extending over a period of years. The researches will include a survey of the mental health of the school population in this area. The researches should result in some valuable findings regarding the nature and extent of the mental health problems in the area under survey, and an indication of the facilities required to deal with these problems.

The committee recommends, -

(a) the continuation of school mental health services operated by the larger municipalities.

(b) the establishment of community clinics (as recommended in Chapter I) to provide a measure of service for the entire province, most of which has no service at all at the present time;

(c) that the results of such pilot studies as the mental health service at the Ontario College of Education and the research project in Forest Hill Village be encouraged, and that the results be studied to ascertain the services required for the pupils and teachers throughout the educational system of Ontario.

CHAPTER VI

MENTAL HEALTH SERVICES FOR REFORM INSTITUTIONS

The committee has made the following survey of the mental health facilities for penal and reform institutions and their requirements. A comprehensive study of this problem would necessitate a review of all the institutions concerned with law enforcement, including the courts (which this committee has studied in Chapter IV), the penal and reform institutions operated by the Province of Ontario, the federal penitentiaries, the system of probation, and a study of the need for mental health facilities at all stages in the administration of justice from the time an offender is apprehended until his conviction and sentence. The committee has endeavoured to concentrate its attention upon a few avenues of inquiry where it is generally recognized that there is a definite need for mental health facilities. Some of these avenues of inquiry have been dealt with in Chapter IV.

This part of the report relates only to those penal institutions which are operated by the Department of Reform Institutions of the Province of Ontario.

The results of our survey appears in Table B25. A letter from the Minister of Reform Institutions is also included.

Letter sent to the Survey Committee from the Minister of Reform Institutions, Dated December 12, 1949.

Thank you for your letter of December 8th, with a copy of the information collected by Dr. Miller. In your letter you asked if there are any recommendations which our Department would like to make to the committee in connection with the extension or improve-

ment of the psychiatric facilities in the penal institutions.

I discussed this matter with Mr. A. R. Virgin, the Director of our Department, and he tells me that at the time of the interview with Dr. Miller he told the Doctor about the Clinic which had functioned prior to the war. Apparently the Clinic consisted of a psychiatrist, a psychologist, and a social worker, who covered some of the general hospitals in the Cobourg-Bowmanville area, and in the course of their duties, called at Bowmanville and conducted a Clinic at the Boys' Training School. This was at least once a month.

The re-establishment of that Clinic would in our opinion be of great value.

(Signed - W. E. Hamilton)

Briefly, the situation is that these institutions are dependent upon the four travelling mental health clinics operated by the Province of Ontario, or in some case, the adjacent Ontario mental hospitals, supplemented in Toronto by the services of the Toronto Psychiatric Hospital.

It is apparent from the Minister's letter that he and his officials are aware of the value of mental health services for certain of the inmates of reform institutions, particularly in the training schools which are operated for younger persons. When mental hospital services have been improved, and with provision of clinic facilities for the general population, it should be possible to improve and extend the mental health services in reform institutions.

TABLE B25
PENAL INSTITUTIONS
(under provincial jurisdiction)

REGION	LOCATION AND NAME	MEDICAL SERVICE	NURSING SERVICE	AVAILABILITY OF PSYCHIATRIST AND/OR PSYCHOLOGIST
2	Burich (near Brantford) Industrial Farm	Part time	No nurses	Dept. of Health, Toronto, and Ontario Hospital, St. Thomas
2	Galt School for Boys (delinquent)	Dr. Urquhart	Two reg. nurses	Dept. of Health, Toronto, and Ontario Hospital, Hamilton
3	Brampton Ontario Reformatory for Boys	Part time	No nurses	Psychologist interne during summer months, psychiatric service by Dept. of Health, Toronto
3	Bowmanville School for Boys	Dr. Birks	Two reg. nurses	Dept. of Health, Toronto and /or Ontario Hospital, Whitby
6	Burwash Ontario Reformatory	Dr. Hassard Dr. Reeds	Three reg. nurses	Psychologist interne during summer months, visited by Mr. Potts, Chief Psychologist from Guelph
3	Cobourg School for Girls	Dr. Wade	Two reg. nurses	Mental Hospital Clinic, O. H. Kingston and Dept. of Health, Toronto
3	Guelph Ontario Reformatory	Dr. Mellow	One reg. male nurse	Mr. Potts, Chief Psychologist stationed here
3	Mimico Ontario Reformatory	Dr. Hughes (part time)	One reg. male nurse	Ontario Hospital, New Toronto
3	Toronto Andrew Mercer Reformatory	Dr. W. H. Hills (full time here and Toronto Jail)	Three reg. nurses	Psychologist interne during summer months, Dept. of Health, Toronto

TABLE B25 (Cont'd.)
PENAL INSTITUTIONS

REGION	LOCATION AND NAME	MEDICAL SERVICE	NURSING SERVICE	AVAILABILITY OF PSYCHIATRIST AND OR PSYCHOLOGIST
5	Alfred (near Ottawa) St. Joseph's (boys)	Part time	Two reg. nurses	Use Ottawa General Hospital (mental health clinic O. H. Kingston)
6	Monteith Industrial Farm	Dr. Legate (part time)	No nurses	
7	Neys (near Port Arthur) Industrial Farm	Part time	None at present	
4	Burritts Rapids Industrial Farm	Part time	No nurses	
LOCAL	TORONTO			
	Toronto Jail	Jail physicians in attendance	None	Have consultant psychiatrist. Use Toronto Psychiatric Hospital.
	(St. Mary's (girls) (Training School ((	Part time		T. P. H. clinic. Consultant psychiatrist service at St. Joseph's Hospital, Toronto
Operated by R.C. agencies	(St. John's (boys) (Training School	Part time		T. P. H. clinic. Consultant psychiatrist service at St. Michael's Hospital, Toronto

CHAPTER VII

PARTICULAR PROBLEMS

This part of the report is devoted to a discussion of certain problems which could not be dealt with appropriately in any of the preceding parts of the report.

Voluntary Agencies

The National Committee for Mental Hygiene (Canada) has been the recognized voluntary agency in the mental health field. During the year 1950 this body was reorganized and is now known as the Canadian Mental Health Association.

The following is a brief statement of the objectives of the organization.

"To work for the conservation of mental health and for improvement in the care and treatment of those suffering from nervous or mental diseases or mental deficiency and for the prevention of these disorders; to conduct or supervise surveys of the care of those suffering from mental diseases or mental deficiency; to cooperate with other agencies which deal with any phase of this problem; to enlist the aid of the federal and provincial governments and to help organize and aid affiliated provincial and local societies or committees for mental hygiene".

The Toronto Metropolitan Area

The concentration of population in the Toronto area makes it advisable, and indeed necessary, that certain mental health facilities be specialized.

For example, it will be noted that in Chapter I, the committee estimated that at least seven community mental health clinics would be required for the City of Toronto. This does not imply that seven separate clinics need be established. The staffs of two or more clinics could be combined. On the other hand, when more than one clinic is functioning in the same area, it is possible for certain clinics to take on a specialized limited function. In the Toronto area, one or more clinics could limit their activities to the examination and treatment of children; one clinic could deal with cases referred by the courts, and so on.

The provision of seven clinics in Toronto is a minimum service. It would not meet all the needs of this area. It would doubtless be necessary to retain the valuable service now being rendered in the clinics operated by the city, the voluntary agencies and the general hospitals.

Similarly, it is possible to establish specialized hospital facilities at the Toronto Psychiatric Hospital. It should be pointed out here that the rapid growth of the Toronto metropolitan area has rendered the existing facilities of the Toronto Psychiatric Hospital inadequate. This hospital is expected to accommodate in the same ward, patients who should be occupying separated accommodation. Thus we find young children, depressed adults, acutely excited patients, patients undergoing surgical operations of the brain and cases referred by the courts, all in the same hospital ward at the same time. This situation can be remedied only by the construction of a new hospital or an addition to the existing hospital large enough to accommodate the needs of the population of this area.

The preceding paragraph draws attention to a very bad situation which exists at the Toronto Psychiatric Hospital whereby children as young as eight years of age are lodged in the same ward with every type of mentally ill adult patient. This situation arises out of the lack of any psychiatric treatment centre for diagnosis and treatment of children.

The Toronto Welfare Council has furnished a brief dealing with this subject.

A unit for children could be established most economically as a division of the Toronto Psychiatric Hospital. This would obviate the necessity of duplicating many of the expensive facilities which are presently available at the hospital and which could be utilized for a children's unit.

Senile Patients

The increasing incidence of senile patients in the patients admitted to Ontario mental hospitals was discussed, Chapter III. It was pointed out that 23.4 per cent of the first admissions during the year 1948 were patients 65 years and over. The committee estimates that 1,100 senile patients in mental hospitals could be cared for in some other type of institution if such accommodation were available.

Alcoholism and Drug Addiction

Part 5 of the Mental Hospitals Act governs the admission of these patients to Ontario mental hospitals. Alcoholics or drug addicts may be received into an Ontario Hospital as voluntary patients. There is also a procedure whereby such a patient may be committed for a period not exceeding two years upon application to a county court judge.

The existing facilities for the treatment of alcoholism and drug addiction are not satisfactory. General hospitals are reluctant to treat these patients. The patients themselves are not satisfied as a rule, to remain in a mental hospital.

In the establishment of any special treatment facilities for these patients it should be recognized that there must be adequate provision for both physical and psychological treatment. It is of paramount importance to ensure that properly qualified medical specialists including psychiatrists are on the staff of such a hospital. It follows that any hospital for the treatment of alcoholism and drug addiction should be located very close to a large medical centre so that it will be readily accessible to the medical staff.

After-care and Rehabilitation

The Mental Hospitals Act contains legal procedure for two types of follow-up care. First there is an arrangement whereby a patient may be released to the custody of his relatives or friends

for a six month probation. If the arrangement is not successful, the patient may be returned to the hospitals without any legal recommittal.

The second arrangement enables the superintendent to board a suitable patient in any suitable home. A place which is designated for this purpose is known as an "approved home". Where necessary, the Department of Health pays for the costs of lodging a patient in an approved home.

Both arrangements have proven successful in Ontario and are used to some extent.

The superintendent of the Ontario Hospital, London, has recently established a special rehabilitation staff with a view of following up patients who are discharged from the hospital, in an endeavour to assist them in any way possible and to prevent a recurrence of their illness. This experimental venture merits continued study with a view to its possible application in other hospitals.

CHAPTER VIII

PSYCHIATRISTS IN PRIVATE PRACTICE

A questionnaire was sent to every psychiatrist engaged in private practice. Every source of information was canvassed to ensure the completeness of the list.

Based on the replies received and further information obtained, it was found that actually there were 37 officially in private practice in psychiatry in Ontario.

The geographic distribution of these 37 was as follows:-

Toronto	--	25
Hamilton	--	2
Kingston	--	3
London	--	1
Ottawa	--	2
Windsor	--	2
Trenton	--	1
Brantford	--	<u>1</u>
TOTAL		37

To the 37 questionnaires mailed there were 28 responses. Of these 28, only 21 were actually engaged in private practice, the others being engaged full time with D.V.A., agency work, etc. Breaking it down further, it was noted that of these 21, the number whose time was primarily devoted to the field of psychiatry amounted to 15. The remaining six, although engaged in psychiatric practice, gave the major part of their time to other branches of medicine, usually neurology.

Further analysis of the questionnaire received in regard to time given over to private practice showed that:-

Nine spent 75 per cent or more of their time in private practice.
 Five spent 50 per cent of their time in private practice.
 Seven spent 10 - 40 per cent of their time in private practice.

Consultation service to agencies (apart from private practice) was found to extend to:-

In-patient and out-patient services of general hospitals.
 Ontario Hospitals.
 D.V.A.
 Child Guidance Clinics.
 Social and Welfare Agencies.
 Courts.
 Community Health Units.

Percentage of private psychiatrists with hospital staff appointments (according to questionnaire) was 90 per cent, i.e., 19 out of 21.

Number of private psychiatrists engaged in teaching program was 13. They provided lectures and clinics to:-

Postgraduate and undergraduate medical students.
 Nurses.
 Public Health Personnel.
 Psychologists.

To the question regarding suggestions for improvement or expansion of psychiatric services, nine out of 28 contributed answers. The following list was compiled in order of frequency mentioned.

1. Establishment of adequate in and out-patient psychiatric facilities in a general hospital.
2. Increase in number of adequately staffed mental health clinics.
3. Provision of psychiatric facilities for schools and public health units, including educational program to personnel involved.
4. Establishment of child guidance centres.
5. Extension of psychiatric teaching to medical students and graduates.
6. Provision of residencies in psychiatry in a general hospital.
7. Expansion in number and size of special psychiatric units, so that admission of patients with psychiatric disorders could be facilitated.
8. Increased accommodation for mental defectives.
9. Supervision of nursing homes which are harbouring psychiatric patients.
10. Special facilities for the examination and investigation of individuals remanded by the court.

As the foregoing suggestions for the improvement and expansion of psychiatric services were received from this group of doctors who are engaged in the practice of psychiatry, they are worthy of particular attention. These suggestions were compiled independently of the recommendations which were being prepared by the committee, which are embodied in this report. It is reassuring

to see that in a general way the recommendations of these practising psychiatrists are in accord with the recommendations of the committee.

The committee concurs in the foregoing recommendations of the practising psychiatrists. In addition we draw attention to the desirability of

employing psychiatrists who are engaged in private practice wherever opportunity presents itself in implementing the various recommendations contained in this report. We refer particularly to the employment on a part time basis of psychiatrists in community clinics, school mental health services, and mental hospitals.

CHAPTER IX

FINANCE

The financial survey commences with a statement of the monies expended in Ontario for mental health services from three sources, -

- (a) the federal mental health grant to the Province of Ontario;
- (b) monies voted by the Legislature of Ontario; and
- (c) monies collected from the municipalities.

(a) Federal mental health grants to Ontario

The Province of Ontario is entitled to two types of grants, namely, the so-called federal grant for mental health and the mental hospital construction grant.

The federal mental health grant is divided on the basis of population. The total federal grant was initiated at \$4,000,000 per year, to be increased to \$5,000,000 at the end of two years, \$6,000,000 at the end of four years and \$7,000,000 at the end of six years. Ontario's share of this grant for 1948-49 was \$1,284,235.; for 1949-50 was \$1,286,465.; for 1950-51 was \$1,625,060. If this policy is continued, Ontario would receive at its maximum, about \$2,300,000 per year.

The mental hospital construction grant is a grant of \$1,500 per bed towards the cost of mental hospital construction.

(b) Monies voted by the Legislature of Ontario

The monies voted for the fiscal year ending March 31, 1950 totalled \$12,177,400. This sum was devoted almost entirely to the maintenance of the Ontario (mental) Hospitals, the Toronto Psychiatric Hospital and the central administration.

(c) Monies collected from the municipalities

These collections were of three different kinds, as follows:

- (i) the railway tax.

Reference to section 65 of the Mental Hospitals Act and section 44 of the Corporations Tax Act (1939) shows that, from a municipality's share of the railway tax, the sum of 10 cents per patient per day is deducted on account of every indigent resident of a municipality who is a patient in an Ontario mental hospital.

The amounts paid by Ontario municipalities to the Province of Ontario under this leg-

islation for 1946, 1947 and 1948 were, -

1946 --	\$173,632.
1947 --	\$173,678.
1948 --	\$206,169.

(ii) Under subsection 2 of section 65 of the Mental Hospitals Act, every municipality pays 50 cents per day for every indigent patient in the Ontario Hospital, Woodstock, who resides in the municipality at the time of admission to the hospital. The following amounts were collected under this section:

1946 --	\$82,576
1947 --	\$79,353
1948 --	\$88,400

(iii) Payments by Toronto and the Township of York to the Toronto Psychiatric Hospital.

Under sections 12 and 13 of the Psychiatric Hospitals Act, if a patient is unable to pay \$1.50 per day for his maintenance in the Toronto Psychiatric Hospital, the municipal corporation (which includes only the City of Toronto and the Township of York) pays \$1.50 a day but not exceeding 10 days.

Under this section, for the fiscal year ending March 31, 1948, the following amounts were collected:

City of Toronto --	\$2,317.87
Township of York --	\$350.00
TOTAL	\$2,667.87

It will be noted that the entire contribution of the City of Toronto for the maintenance of patients in the Toronto Psychiatric Hospital for one year amounted to \$2,317.87. The amount is surprisingly low in view of the fact that this hospital admits, for the most part, only residents of Toronto. For this same period the Province of Ontario spent \$202,418.73. In the year 1948, of 443 patients admitted to the Toronto Psychiatric Hospital, 387 were residents of the City of Toronto. There were 53 from outside of Toronto and three whose addresses were unknown.

In addition to the foregoing three types of liability, under section 63 of the Mental Hospitals Act, a municipality is liable for certain of the expenses incurred in determining the mental condition of persons committed to the Ontario Hospitals and in conveying such persons to the hospitals.

There are doubtless historic reasons for the various kinds of municipal liabilities des-

cribed in the foregoing paragraphs. The committee is unable to find any rational explanation for the continuation of these municipal liabilities.

For over a century it has been recognized that it is an obligation of the province to provide and maintain mental hospitals. The province collects a modest payment for maintenance from these patients who are able to pay. The minimum rate is presently fixed in the regulations at \$7.00 per week, except at the Whitby and Woodstock hospitals where the rate is \$10.50 per week, but in many cases the full rate cannot be collected. The province collected for patients' maintenance for the fiscal year ending March 31, 1948, \$1,600,985.11; for the fiscal year ending March 31, 1949, \$1,807,574.23; and for the fiscal year ending March 31, 1950, \$1,783,895.94.

In establishing a policy with respect to the collection of maintenance from patients in mental hospitals, it is necessary to emphasize the long duration of the illness in most cases. This policy should be reviewed from time to time to insure collection of reasonable amounts from patients who can pay without inflicting hardship upon themselves or their families. The ultimate goal should be the provision of mental hospital treatment without charge to the individual patient.

The committee is of the opinion that there is no reason to continue the municipal liability referred to in clause (i) and (ii) above that this liability should be revoked.

On the other hand, the municipal liability referred to in clause (iii) above should be increased. In other words, the municipalities should contribute to the maintenance of indigent patients in psychiatric hospitals to the same degree that they contribute on behalf of patients in general hospitals.

It is considered that the responsibility placed upon municipalities in connection with the expense of certifying patients and paying for their transportation to hospital in section 63 of the Mental Hospitals Act should be continued. It is not an onerous financial obligation: in most years, most municipalities would pay nothing and in any year no municipality would pay a large sum.

The committee recommends that instead of the archaic forms of municipal liability that are presently imposed, municipalities should be encouraged to strengthen and support the mental health services within the boundaries of the municipality. Municipal aid could assist in expansion of the community clinics recommended in Chapter I and the establishment and maintenance of psychiatric hospitals and psychiatric units in general hospitals recommended in Chapter III.

With reference to the federal mental health grant to the Province of Ontario, the committee recommends that in the spending of this money

priority should be given first to expenditures on community clinics, secondly, to the improvement and extension of training facilities and the remainder should be devoted to the improvement of mental hospital facilities. The committee recommends this priority in view of the fact that the maintenance of mental hospitals is primarily a provincial responsibility, and that federal funds should be used for this purpose only when clinic and training facilities are adequate.

The estimated cost of implementing all of the recommendations contained in this section is set out in Table B26 which appears at the end of this chapter. The following comments should be read in conjunction with the table.

The first expenditure recommended is the sum of \$600,000 annually for clinics. This has been explained and discussed at length in Chapter I.

The next commitment is the sum of \$500,000 annually for training facilities. The present expenditures for this purpose exceed \$350,000 per year at the University of Toronto. This money is paid to the University of Toronto out of the federal mental health grant to the Province of Ontario. The committee has recommended in Chapter II that the training facilities of the other universities having departments of psychiatry (Queen's, University of Western Ontario and University of Ottawa) be utilized. It is estimated that \$500,000 per year would finance the training program at its peak.

Looking at the calculations in Table B26, respecting Chapter III, Hospital Facilities, it will be noted that the committee has estimated the capital cost of 11,400 beds at \$62,700,000. The cost has been estimated at \$7,000 per bed and the federal contribution of \$1,500 per bed has been deducted. The actual cost can be determined only when tenders are let, at which time the estimates should be corrected, if necessary.

The additional 11,400 beds will require an annual expenditure for the maintenance of the patients. The committee has estimated this cost at \$1.84 per patient per day. This was the average cost in the year ending March 31st, 1949, the latest information available to the committee.

The remainder of the table is self-explanatory.

The estimate of the total annual costs is \$9,421,809 and of this sum over \$7,500,000 would be needed to defray the cost of maintaining the additional hospital accommodation. The remainder would be spent on clinics, training facilities and extra psychiatric staff, all of which the committee consider to be necessary if our mental health facilities are to be maintained at a reasonable standard.

It should also be noted that Ontario would not be required to provide all of the \$9,421,809. When the federal grant for mental health reaches its maximum, Ontario should receive about \$2,300,000 a year which can be applied to reduce these costs.

TABLE B26

**ESTIMATED COST OF IMPLEMENTING REPORT
ESTIMATED COST OF IMPLEMENTING MENTAL FACILITIES AND SERVICES REPORT**

Recommendations	Capital Cost	Maintenance Cost
Chapter I, establishment and maintenance of community clinics		\$600,000
Chapter II, extension of training facilities		500,000
Chapter III, hospitals facilities		
(a) 11,400 additional beds	\$62,700,000*	7,656,240**
(b) 53 psychiatrists @ \$7,000		371,000
(c) other additions to staff and increase in salary schedules	***	***
TOTAL -- Chapters I - II	\$62,700,000	\$9,127,240
Chapter VI - VIII: recommendations contained in these parts of the report would be covered in the above expenditures provided that some of the appropriation for hospitals and clinics is used to extend the Toronto Psychiatric Hospital		
Chapter IX, revocation of municipal liability		294,569
GRAND TOTAL	\$62,700,000	\$9,421,809

* 11,400 beds at \$7,000 per bed is \$79,800,000. Deduct federal grant of \$1,500 per bed -- \$17,100,000. Cost to Province would be \$62,700,000.

** It costs \$1.84 to maintain 1 patient for 1 day (see Table B19). The annual expenditure for 11,400 patients would be \$7,656,240.

*** Cost cannot be estimated at this stage but would include payment of additional psychologists, social workers, and any increases in the salaries of personnel now employed.

**REPORT OF THE ONTARIO
HEALTH SURVEY COMMITTEE**

SECTION C

PRIVATE NURSING HOMES

(Pages 159 to 168)

C. PRIVATE NURSING HOMES

CONTENTS

	Page
Summary	162
Recommendations	162
Chapter I: Inventory of Private Nursing Homes in Ontario	164
Chapter II: Conditions Found in Private Nursing Homes	167
Chapter III: Legislation with Respect to Private Nursing Homes	168

PRIVATE NURSING HOMES

SUMMARY

Investigation of private nursing homes in Ontario is greatly hampered by the failure of existing legislation to provide a working definition of this type of institution (see Chapter III of this section of the Survey Committee's report). This fundamental weakness leads inevitably to a lack of regulation and control over standards of care and accommodation in the 587 nursing homes discovered by the Survey Committee's field staff. And it is directly responsible for the deplorable conditions under which patients are kept in many such places throughout the province.

The 587 nursing homes which it was possible to locate represent a total capacity of 4,057 beds--many of them crowded into cramped and unsuitable quarters. There is an unknown number of such places in addition to these, some passing themselves off as ordinary boarding houses.

The inadequacy or total absence of records in many places, which are to all intents and purposes private nursing homes, makes it impossible to tell the actual numbers of patients and patient days of care provided in 1948 or in any other year. A rough approximation, on the basis of 60 per cent occupancy in only those 587 which were located, yields a minimum total of 890,917 days of care. Altogether these places add substantially

to the capacity of Ontario to care for those of its citizens who require special accommodation. It is therefore of the utmost importance to the overall health program that private nursing homes should continue to play their part--if they can, by a strictly enforced system of licensing and regular inspection, be brought up to the standards now met voluntarily by a number of well run homes.

In the 100 maternity boarding houses, which are subject to some control, there were 2,854 births recorded in 1948. This helps to demonstrate the extent to which such privately operated establishments relieved some of the demand on overcrowded public general hospitals that year.

An even more important function of the private nursing home, however, is in its accommodation of long-term patients, and particularly aged persons with some degree of disability. Here they can render valuable service and, again, relieve some of the pressure on public general and long-term hospitals. There are many patients occupying active treatment beds who might, just as satisfactorily and much more economically, be looked after in establishments with less elaborate and less expensive equipment. But no patient can properly be consigned to a bed in some of the unclean, crowded, depressing "nursing homes" visited in the course of this survey.

RECOMMENDATIONS

It is recommended:-

- 1 - That all private nursing homes, giving care to minor-surgery, maternity, chronically-ill, convalescent and aged patients, irrespective of size and bed capacity, be required to register with the Ontario Department of Health and that an appropriate and comprehensive system of licensing be inaugurated at the provincial level.
- 2 - That private nursing homes be required to notify licensing officials (provincial and local) of any change of address or discontinuance of business.
- 3 - That all nursing homes be required to maintain a register of patients with particulars as to name, age, and next of kin.
- 4 - That the license issued to private homes contain the injunction that it must be displayed in the admitting room, or in some equally prominent place, in the licensed home.
- 5 - That a plan of inspection be instituted at the provincial level, whereby a sufficient

number of competent and efficient inspectors be added to the present limited staff to ensure the enforcement of regulations pertaining to private nursing homes.

- 6 - That provincial or local health inspectors making inspections of private nursing homes and maternity boarding houses be required to ascertain whether proper admission books, registers of infants, and doctors' order books are being maintained in accordance with requirements under the act, and that inspectors be required to report on the frequency and results of inspections.
- 7 - That inspectors be required to make regular inspections and report to the proper authority the conditions found in nursing homes, particularly with respect to the number of patients; extent of overcrowding; adequacy of sanitary facilities; fire hazards; type of care; maintenance of records, and admission books.
- 8 - That prior to the issuance of a license, steps be taken to ensure that proper accommodation and equipment will be provided

for patients, thus preventing the deplorably crowded conditions now existing in some nursing homes.

- 9 - That an attempt be made to segregate the aged with mental infirmities. The old people whose physical deficiencies are those normal to old age, and whose minds

are still clear, should not be subjected to confinement with advanced senile and mentally-ill patients. The care of this special group, in close quarters with the aged with physical infirmities, is difficult. The former often require special attention which is unduly disturbing to patients who are better orientated.

CHAPTER I

INVENTORY OF PRIVATE NURSING HOMES IN ONTARIO

The Survey Committee, while engaged in its study of hospital facilities in the province, discovered that a large number of unregistered institutions, known by a variety of names such as nursing homes, rest home, convalescent homes and maternity homes, were providing in-bed care and operating without license, inspection, or compliance with the regulations of the Ontario Department of Health.

The task of locating these privately operated homes giving care to minor surgery, maternity, chronically-ill and convalescent patients, and aged persons and pensioners, proved to be difficult because there were no known lists or records from which names and addresses could be secured.

The survey succeeded in establishing the existence and location of 587 private nursing homes with a total capacity of 4,057 beds.

Births in Maternity Boarding Houses

In 100 of the homes, which under existing legislation fall within the category of "Maternity Boarding Houses", there occurred 2,854 births during the year 1948.

It has been found that a number of maternity homes are admitting chronically-ill, aged and surgical patients in violation of the Maternity Boarding Houses Act which specifically states that no maternity boarding house, shall admit any person "except women or girls for accouchement, and mothers with infants" and requires that "every birth which takes place in such house shall be attended by a legally qualified medical practitioner". In certain instances, this latter stipulation has been ignored.

Information obtained by the Committee shows that minor surgery was done by 14 maternity boarding houses during 1948. Three homes reported the number of operations performed as follows:

Region 1.	1 home	25 operations
Region 2.	2 homes	82 operations

The Maternity Boarding Houses Act provides for the issuance of two record books to be supplied, upon request, by the Ontario Department of Health to local medical officers of health. Every maternity boarding house registered with the local medical officer of health is entitled to receive gratuitously from him a copy of each of these books, one for recording information as to admission of mother, and birth, and the other a register of facts regarding the infant and its destination when discharged. Both record books contain a copy of the Maternity Boarding Houses Act, one clause of which pertains to adoptions. Despite the provisions of this act, visiting members of the Ontario Health Survey staff did not find these record books in use in the maternity boarding houses visited by them.

The majority of the operators of maternity boarding houses, located by the survey, claimed to have registered with the local health authorities as required by the act. However, owing to absence of records, complete lists of those registered could not be secured. Some of the homes have been inspected from time to time by local health authorities, but there is sufficient evidence to show that, in many instances, where health regulations and legal requirements have been ignored, no disciplinary action has been taken.

TABLE C1
PRIVATE NURSING AND MATERNITY HOMES, 1948

	No. of Homes	No. of Beds	Births	Still-births	Infant Deaths	Other Deaths	No. of Reg'd* Nurses	No. of Practical Nurses*
1 - 3 Beds	283	746	1622	30	23	51	22	51
4 - 10 Beds	203	1246	1207	17	10	63	42	82
11 - 25 Beds	80	1305	24	0	0	117	45	84
26 - 85 Beds	21	760	1	1	0	29	31	30
TOTAL	587	4057	2854	48	33	260	140	247

* In addition, there are 28 part time reg'd nurses and 43 part time practical nurses.

TABLE C2
NURSING AND MATERNITY HOMES BY BED CAPACITY AND HOSPITAL REGIONS

REGION 1		No. of Homes	No. of Beds
	1 - 3 Beds	50	111
	4 - 10 Beds	41	216
	11 - 25 Beds	22	398
	26 - 50 Beds	3	101
	TOTAL	116	826
REGION 2	1 - 3 Beds	55	106
	4 - 10 Beds	40	277
	11 - 25 Beds	10	169
	26 - 50 Beds	6	188
	TOTAL	111	740
REGION 3	1 - 3 Beds	119	291
	4 - 10 Beds	114	799
	11 - 25 Beds	41	646
	26 - 85 Beds	11	443
	TOTAL	285	2,179
REGION 4	1 - 3 Beds	19	47
	4 - 10 Beds	2	20
	11 - 25 Beds	1	14
	TOTAL	22	81
REGION 5	1 - 3 Beds	22	31
	4 - 10 Beds	2	14
	11 - 25 Beds	5	88
	26 - 50 Beds	1	28
	TOTAL	30	161
REGION 6	1 - 3 Beds	16	30
	4 - 10 Beds	4	20
	11 - 25 Beds	1	15
	TOTAL	21	65
REGION 7	1 - 3 Beds	2	5
	TOTAL	2	5
GRAND TOTAL		587	4,057

TABLE C3
MATERNITY HOMES BY HOSPITAL REGIONS

	No. of Homes	Beds	Births
Region 1	20	51	517
Region 2	16	82	559
Region 3	41	136	997
Region 4	6	27	116
Region 5	9	17	266
Region 6	7	24	381
Region 7	1	2	18
TOTAL	100	339	2, 854

Difficulty in Classification

From various sources, the names of operators and the location of 835 private nursing homes were secured. Upon examination, however, it was decided that there seemed to be some uncertainty about 248 of these as to whether they should be classified as boarding houses for the aged rather than institutions giving in-bed care. Therefore, they have been deleted from the lists, and only those, about which there appears to be no doubt, have been recorded.

While it has been possible to establish the location of 587 homes, this is by no means submitted as a complete list. Members of the Survey Committee staff engaged in the work of visiting different regions within the province, estimate that it would be reasonably safe to add, to the listed number, another 20 per cent to allow for those which have not been located. For the purpose of this report, however, it is felt that the information secured is sufficient to show a

lack of supervision which permits such a condition to exist throughout the province.

Because of incomplete or total absence of records in nursing homes, it was impossible to arrive at the number of patients or patient days with any degree of accuracy. However, roughly estimated on the basis of 60 per cent occupancy, the nursing homes located by the survey would provide approximately 890,917 days of accommodation.

The 487 private nursing homes admitting chronically ill, convalescent, and aged patients, with the exception of those located in certain larger centres, have not been registered or licensed at any level. In fact in some instances local authorities are seemingly unaware of the existence of many of these nursing homes. In at least two of the larger cities, however, city licenses are required to operate nursing homes regardless of the number of beds. This is a purely municipal measure.

CHAPTER II

CONDITIONS FOUND IN PRIVATE NURSING HOMES

Visits by members of the Survey staff revealed that many operators of homes were not conforming to acceptable standards of cleanliness, sanitation, and livable space for patients.

Some of the premises visited were obviously overcrowded, and showed a deplorable shortage or complete absence of competent nursing care. Aged bed patients were found in a most unsatisfactory condition. The preparation and serving of food was such that meals were neither palatable nor regular.

Another distressing situation has been observed in some of the homes admitting aged persons. Some of the old people, while unable to care for themselves, were quite clear mentally, yet they were housed in congested quarters with cases of advanced senility and mentally-deranged persons.

Fire Hazards Undeniable

Patients have been found on the third floor of nursing homes, where fire hazards are undeniable. Ordinary safety precautions have been ignored. Buildings where in-bed patients are being admitted have basements containing considerable quantities of inflammable refuse. Fire escapes were found to be lacking in most cases.

Many of the nursing-home operators acknowledged that they were not keeping records of the number and names of patients, nor were they registering the names and addresses of next of kin in a proper admittance book. In most cases, medical records giving diagnoses and doctors' orders for medication are non-existent.

On the basis of the survey's findings, it is evident that there is no properly organized effort, at any level, to supervise and inspect these homes adequately.

The Demand for Nursing Homes

The increase in the number of nursing homes in the province may be attributed in part to a basic shortage of accommodation, both in

living quarters and public institutions. Some of the public general hospitals are overtaxed to supply beds for the seriously-ill, injured, and surgical patients, and this has made it expedient to find other accommodation for those requiring less medical attention. However, it has been suggested by an authority in the medical field that many nursing homes owe their existence to the fact that the general practitioner frequently has difficulty in getting his patients admitted to hospital.

The problem of caring for the aged has no doubt contributed to the growth of the private nursing home. Because of inadequate living quarters and shortage of domestic help, many families, who under different circumstances would have cared for their own, have been forced to send their sick and aged to places where nursing is provided.

Service Commendable in Better Nursing Homes

While there are, unfortunately, a great number of homes where patients are existing under distressing conditions, it is only fair to state that here and there may be found a maternity home or a nursing home which, while limited as to equipment and certain material comforts, definitely fills a need in the community. From such places as this inquiries have been received seeking information regarding procedure and showing plainly that guidance and supervision would be welcomed.

In some cases, persons with training and organizing ability have opened homes to fill the gap between the public general hospital and the rest home. In a limited number of these, the service is commendable. On the other hand, there is a much larger group in a marginal position, i.e., nursing homes for the aged and for the aged with physical or mental infirmities. In some parts of the province, the local welfare departments have, in the absence of other accommodation, adopted the system of sending indigents to this group of nursing homes. The rates paid by the municipalities range from \$2.50 to \$3.00 per day. In one case, a city has paid as high as \$3.75 a day, which is more than is being paid by the same municipality to public general hospitals for indigent patients.

CHAPTER III

LEGISLATION WITH RESPECT TO NURSING HOMES

In order to clarify the situation in regard to legislation applying to nursing homes, the Survey Committee submits the following:

The Maternity Boarding Houses Act (R. S. O., 1937, Chap. 311)

This act applies to any private maternity home not licensed under the Private Hospitals Act, and also to a boarding house for infants under the age of three years. All such places must be registered with the local medical officer of health regardless of the number of beds. Under the act, the medical officer of health is directed to keep a register of the names of those applying for registration and he has the power to fix the number of women or girls or infants to be admitted. Where the applicant is unable to provide certificates showing good character and the ability to maintain, keep and properly lodge such women or girls or infants, the medical officer of health may refuse registration. The medical officer of health is required to provide for the visiting and inspection of the homes registered and, where the provisions of the act are not being observed, cancellation of registration and penalties may be imposed.

The Private Hospitals Act (R. S. O.), 1937, Chap. 391)

This act and the regulations are administered by the Department of Health of Ontario. If an institution comes under this act, it must have a license from the provincial Department of Health, and be subject to inspection and control by the officials of the department.

The following is an excerpt from this act:

" 'Private Hospital' shall mean a house in which four or more patients may be admitted for treatment other than:-

- (i) a hospital under the Public Hospitals Act
- (ii) a sanatorium under The Sanatoria for Consumptives Act
- (iii) a hospital or other establishment or institution wholly or mainly supported by provincial aid
- (iv) an institution in respect of which a license under the Private Sanatoria Act is in force; or
- (v) an institution for the reclamation and

cure of habitual drunkards established under The Municipal Act:

and without restricting the generality of the foregoing, 'private hospital' shall include,

- (i) every convalescent home, rest home, and private sanatorium for consumptives; and
- (ii) any private refuge for the aged and infirm, home, refuge or other hospital or premises which is so designated by the Lieutenant-Governor in Council."

The Public Health Act (Section 80a enacted 1945, Chap. 17 Sec. 5)

"Where a Medical Officer of Health, inspector or other person in making any inspection or examination under Section 80, finds that any premises are used for the accommodation of aged or infirm persons for gain or reward he may give such orders or directions as, in his opinion, are necessary to insure that such persons receive proper care and treatment and in the event that his orders and directions are not carried out, he may order that the premises cease to be used for such accommodation."

Ambiguity in Existing Legislation

It is to be noted that the term "private hospital" does not include a private refuge for the aged or infirm until it has been "so designated by the Lieutenant-Governor in Council". The question as to whether or not private nursing homes admitting the aged and infirm require a provincial license from the department, rests upon the interpretation of the Private Hospitals Act.

The Private Hospitals Act does not give a definition of the term "rest home". However, the definition of "private hospital" in the act is "a house in which patients are or may be admitted for treatment." "Treatment" in its legal definition means "the stay, maintenance, observation, care, nursing and treatment of a patient".

From the foregoing, it would appear that the ambiguity in legislation relates to those places which are maintained primarily for the aged and infirm, and it would also appear that there is no clear-cut policy in the provincial Department of Health as to whether private nursing homes are to be licensed under the Private Hospitals Act.

**REPORT OF THE ONTARIO
HEALTH SURVEY COMMITTEE**

SECTION D

DENTAL FACILITIES AND SERVICES

(Pages 169 to 198)

D. DENTAL SERVICES

CONTENTS

	Page
Summary	172
Recommendations	173
Chapter I: Inventory of Dental Services in Ontario	175
Chapter II: Assement of Dental Health	183
Chapter III: Dental Public Health Services	189
Chapter IV: Dental Public Health Education	193
Chapter V: Dental Personnel Training Facilities in Ontario	194
Chapter VI: Dental Public Health Program	198

DENTAL FACILITIES AND SERVICES

SUMMARY

This section of the report deals with the availability of dental services in Ontario, in relation to present and future needs. It reveals a distinct shortage of dentists and an inequitable distribution of the too few dentists who are available. It shows that the province's dental training facilities are unable to produce enough dentists to give adequate care to Ontario's present population, much less to cope with the rapidly increasing numbers of new residents.

In the last quarter century, Ontario's population has increased from three million to more than four and a quarter million. In the same period, the province's only dental school, the Faculty of Dentistry of the University of Toronto, has graduated 2,036 dental surgeons, and not all these remain in active practice in Ontario. Death, retirement, and migration to other provinces and to the United States left only 1,188 of the original 2,036 at the time of this survey (See Table D9).

In 1923 there were 1,670 dentists on the Royal College of Dental Surgeons' register; and in 1948, with an increase of 1,255,000 in population, the Ontario register yielded only 1,920 dentists. Of this 1,920 there were 74 engaged in government or administrative service, leaving 1,846 actually ministering to the dental needs of the population.

The Survey Committee's study of these 1,846 Ontario dentists reporting to be in private practice discloses that 209 were 65 years of age and over--86 of them between the ages of 65 and 70, 102 between 70 and 80, 18 between 80 and 90, and three between 90 and 94 years. In 1948, nearly half (49.9 per cent) of all Ontario's practising dentists were 50 years of age and over.

The number of dental students expected to graduate in the years 1950, 1951, and 1952 totals 400. These abnormally large graduation classes reflect the increased numbers of students enrolled immediately after World War II; but after 1952 the classes are expected to decline to approximately 75 graduates per year. The inadequacy of such classes in the face of the increasing demands of a growing population and the rapid falling off of dental surgeons in the upper age bracket is readily apparent.

Clearly then Ontario's prime need in this phase of its health program is for increased dental training facilities and more young dentists. Training dentists requires five years; but short

of this period, it is felt some improvement can be brought about by initiating a two-year diploma course for dental hygienists.

Dental hygienists are girls with university entrance qualifications, trained to do certain work in the patient's mouth under the employer-dentist's supervision. It is proposed that her duties will include dental prophylaxis, x-ray examination, polishing of fillings, recall service, oral hygiene instruction, topical application of fluorides, and patient education. No dental hygienists training courses were offered in Canada at the time of this survey, although four universities--one in Ontario--were considering such a course. Purpose of the dental hygienist, both in a dental practitioner's office and in the public health field, is to relieve the dentist of certain time-consuming tasks, which dental nurses are not specially trained to carry out, and thus to enable him to give more hours of dental care to more people.

To determine the extent to which children in Ontario are suffering from lack of dental care, the Survey Committee conducted a sampling of dental conditions among school children in 80 rural public and separate schools in diverse sections of the province and studied the records supplied by four urban centres. This study of 19,361 children is analysed in detail in the body of the report. It revealed, among other facts, that 85.8 per cent of the 19,361 children examined had dental defects--85 per cent average among urban children, and 92.9 per cent in rural localities. In one remote northern area 71 per cent of the children had no dental care at all; and incidence of dental defects ran as high as 95.6 per cent (Table D5).

Best conditions among children were found in an area where an organized dental health education program had been in operation for several years and where parents are encouraged to seek dental care for their children. Availability of enough dentists is, of course, an essential in improving the condition of children's teeth; but it does not always follow that areas with the highest ratio of dentists to population necessarily boast the healthiest children's teeth.

The dental practitioner today is faced with increasing adult demands for dentistry, and until very recently his training did not include any special work in dentistry for children. These factors, combined with the absence of organized dental health education programs, have meant that in many areas children have not been receiving

their share of even such inadequate facilities as may be available.

Distribution of Ontario dentists by counties and districts is illustrated on Map D1, and the ratio of population per dentist, as of 1948, is shown. This ratio ranges all the way from one dentist per 1,495 persons in York county, to one per 18,116 in Russell county near Ottawa.

In this latter case, proximity to Ottawa in part relieves the disproportionate ratio between dentist and population, since many residents of the area are reported to seek dental service in the capital; but in the more remote areas the situation is more critical. In many outlying parts of rural Ontario where the population and economy are not sufficient to support a resident dentist, there is no provision at all for dental care. One hope of such an area as this lies in the extension of mobile dental service facilities.

There were five such mobile dental coaches operating in the province at the time of this survey, and one dental railway car. The dental railway car was being operated by the Dental Division, Ontario Department of Health, and it served

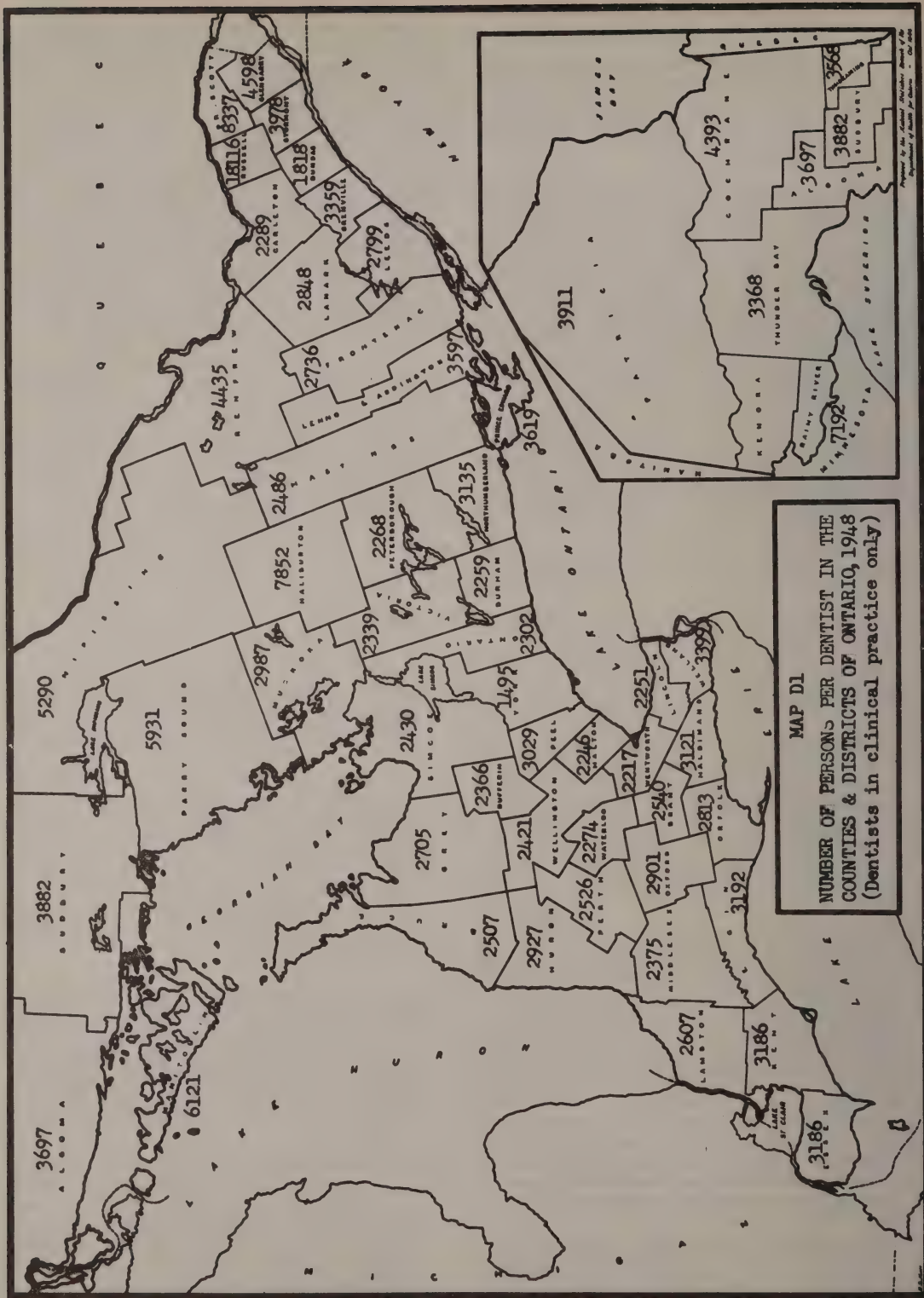
communities along one northern railway line only. The Ontario division, Canadian Red Cross Society, was responsible for keeping two dental trailer coaches on the road in more remote parts of the province. Two of the other three trailer coaches were attached to health units in St. Catharines-Lincoln and Halton counties, and the third was operated by the township of North York. The dental railway car is primarily concerned with giving treatment to school children, while the Red Cross trailer coaches emphasize dental health education as well. The St. Catharines-Lincoln and Halton county coaches do examination and educational work only, referring children to local dentists for actual treatment; and the North York unit operates as an auxiliary to the regular school dental health program, offering examination, education and treatment.

It is clear from the reports of these mobile units that they are breaking important ground; but it is equally evident that the few now available can do no more than make a start toward raising the level of dental health among the children of Ontario. More such facilities, just as more dental training facilities and more practicing dentists, are badly needed in this province.

RECOMMENDATIONS

It is recommended--

- 1 - That in order to overcome the serious shortage of dentists, detailed in the body of this report, and to provide adequate dental care for the children and youth of Ontario, dental training facilities in this province be increased to produce a minimum of 120 new graduates in dentistry each year instead of fewer than 60 as was the case from 1927 until 1948.
- 2 - That a two-year course for training 10 dental hygienists a year be initiated in Ontario in conjunction with the dental course, in order to relieve the dentist, both in his office and in public health work, of certain time-consuming tasks which dental nurses are not specially trained to carry out, and so to enable him to give more hours of dental care to more people.
- 3 - That dental examination and treatment facilities be extended, where feasible, in public general hospitals, and that special effort be made to establish these facilities in hospitals in the more remote parts of the province.
- 4 - That additional railway dental cars and dental trailer coaches be provided to bring dental care and education to those sections of the province which are now totally lacking in dental facilities; and that regular schedules and routes be established for these mobile clinics.
- 5 - That dental care be made available to all welfare recipients, and that organized dental services, supplied by part-time staff, be made available in institutions operated by the Ontario Department of Welfare.
- 6 - That additional funds be provided for an intensive program of research into subjects relating to the prevention of dental defects.
- 7 - That the provincial program of dental inspection, treatment and education in schools be strengthened and extended, and that records be kept in accordance with the requirements of the regulations for dental inspection in schools under the Public Health Act to show the number of children so looked after, and the condition of their teeth.
- 8 - That as a stimulus to the recruitment of dental personnel into the public health field, the Faculty of Dentistry of the University of Toronto endeavor to make arrangements for dentists interested in postgraduate public health training to get necessary practice experience in the outpatient departments of public general hospitals.



CHAPTER I

INVENTORY OF DENTAL SERVICES IN ONTARIO

Numbers of Dentists

Dentists in the Province of Ontario who appear on the register of the Royal College of Dental Surgeons number 1,920. Table D1 shows the distribution of the dentist-population ratio by counties. Those actively in the practice of dentistry as of December 31, 1948, number 1,846. Their distribution and ratio to population are also shown in Table D1, by counties and districts.

It will be noted that counties having large urban centres account for the largest percentage of variation between those registered and those in active practice. This can be accounted for, in some degree, by the number in administrative and teaching appointments in those areas.

Map D1 is the visual presentation of the number of persons served by each dentist in active practice. In some communities which are not far distant from large urban centres, the ratio of population served by each dentist will not show the true picture. For example, the available dental services shown in Russell County could not be considered as serious a dental health problem as that in Manitoulin. The close proximity of the former to a centre like Ottawa would make services available and possibly secured in that city. However, the lack of personnel to provide dental health services in remote, sparsely settled areas is obvious.

Another important factor in the present and future availability of dental services is the distribution of dentists by age groups. Table D2 shows the distribution of all dentists holding dental degrees in Ontario by age groupings. Each group beginning at age 20 is a five-year grouping. Table D2 also shows the distribution of dentists who are in active practice.

Chart D1 demonstrates the distribution of dentists by age groups, and it should be noted that 57.5 per cent of the dentists shown on the register of the Royal College of Dental Surgeons (Table D2) are included in the ages 40-60 years. It is also interesting to note the extremely high percentage of this group in active practice. Those 60 years of age and over on the register represent 17.5 per cent of dentists registered in Ontario, a similar percentage of whom are still in active practice.

Of all dentists in active practice in the province, 49.8 per cent are 50 years of age and over. The reason for this can be explained by the

large classes entering dentistry in the early twenties, following World War I. They now appear in age groups beyond 50 years.

The smaller classes of the thirties, (depression years), were not sufficiently large to meet the annual needs for dentists to serve an increasing population. Chart D2 shows the number of graduates each year since the first postwar class in 1923. Chart D2 also shows the steady population rise during the same period.

Using the Life Table for Ontario Males for 1941, it is estimated that of the 1,248 dentists, age 45 years and over, who were in practice in 1948, 944 will be living in 1958, and 580 will be living in 1968.

It is also estimated that 30 dentists will be lost from active practice each year by death, the total loss, including retirement, being somewhat greater. This loss will increase sharply, commencing in 1961, due to the abnormal age distribution of the dentist population.

The facilities, personnel and services of the Faculty of Dentistry of the University of Toronto, considered later in this report, show the potential yearly output of dental personnel, on the basis of present accommodation, as being 61 dentists, 25 dental nurses, 10 dental hygienists and 20 graduate students (i.e., specialty and diploma course candidates). The number of new graduates expected in 1950, 1951 and 1952, which represents large postwar classes, will be 400 dentists and 75 dental nurses. In years beyond 1952, the output of dentists may be expected to fall lower. During the 25-year period 1924-49, the graduating class averaged 56 graduates.

The shortage of dentists will become more critical by 1961, when the loss by death and retirement will begin to increase sharply, due to the disproportionate numbers of dentists now in practice at ages 45 to 54 years.

Field of Activity

Another factor which relates to the availability of dental services is the number of dentists giving only part time to dental practice.

On the register of the Royal College of Dental Surgeons are 1,920 dentists; 1,856 are shown as general practitioners and 64 as specialists.

TABLE D1

COUNTY	DENTISTS REG'D WITH THE ROYAL COL- LEGE OF DENTAL SURGEONS IN ONTARIO at December 31, 1948*						DENTAL SURGEONS FOUND BY SURVEY TO BE IN ACT- IVE PRACTICE IN ONTARIO at December 31, 1948**					
	Estimated Population 1948	% of Population	Number of Dentists	% of Total Dentists	Dentists per 1, 000 of Population	Number of Persons Served by One Dentist	% of Population	Number of Dentists	% of Total Dentists	Dentists per 1, 000 of Population	Number of Persons Served by One Dentist	
Algoma	59,158	1.39	16	.83	.27	3,697	1.39	16	.87	.27	3,697	
Brant	66,043	1.55	27	1.41	.41	2,446	1.55	26	1.41	.39	2,540	
Bruce	42,623	1.00	17	.89	.40	2,507	1.00	17	.92	.40	2,507	
Carleton	226,644	5.33	116	6.04	.51	1,954	5.33	99	5.36	.43	2,289	
Cochrane	87,858	2.06	20	1.04	.23	4,393	2.06	20	1.08	.23	4,393	
Dufferin	14,196	.33	6	.31	.42	2,366	.33	6	.33	.42	2,366	
Dundas	16,359	.38	9	.47	.55	1,818	.38	9	.49	.55	1,818	
Durham	27,104	.64	12	.62	.45	2,259	.64	12	.65	.45	2,259	
Elgin	51,070	1.20	17	.89	.33	3,004	1.20	16	.87	.31	3,192	
Essex	200,709	4.72	64	3.33	.32	3,136	4.72	63	3.41	.31	3,186	
Frontenac	60,201	1.41	27	1.42	.45	2,230	1.41	22	1.19	.37	2,736	
Glengarry	18,391	.43	4	.21	.22	4,598	.43	4	.22	.22	4,598	
Grenville	16,796	.39	5	.26	.30	3,359	.39	5	.27	.30	3,359	
Grey	59,510	1.40	23	1.20	.39	2,587	1.40	22	1.19	.37	2,705	
Haldimand	21,846	.51	7	.36	.32	3,121	.51	7	.38	.32	3,121	
Haliburton	7,852	.18	1	.05	.13	7,852	.18	1	.05	.13	7,852	
Halton	35,935	.84	16	.83	.45	2,246	.84	16	.87	.45	2,246	
Hastings	69,600	1.64	30	1.56	.43	2,320	1.64	28	1.52	.40	2,486	
Huron	43,900	1.03	16	.83	.36	2,744	1.03	15	.81	.34	2,927	
Kenora & Patricia	35,221	.83	9	.47	.26	3,911	.83	9	.49	.26	3,911	
Kent	74,007	1.74	28	1.46	.38	2,643	1.74	28	1.52	.38	2,643	
Lambton	67,793	1.59	26	1.36	.38	2,607	1.59	26	1.41	.38	2,607	
Lanark	34,174	.80	12	.62	.35	2,848	.80	12	.65	.35	2,848	
Leeds	36,384	.85	13	.68	.36	2,799	.85	13	.70	.36	2,799	
Lennox & Addington	17,986	.42	5	.26	.28	3,597	.42	5	.27	.28	3,597	
Lincoln	78,782	1.85	35	1.83	.44	2,251	1.85	35	1.90	.44	2,251	
Manitoulin	12,241	.29	2	.10	.16	6,121	.29	2	.11	.16	6,121	
Middlesex	147,236	3.46	67	3.49	.46	2,198	3.46	62	3.36	.42	2,375	
Muskoka	23,898	.56	8	.42	.33	2,987	.56	8	.43	.33	2,987	
Nipissing	47,612	1.12	9	.47	.19	5,290	1.12	9	.49	.19	5,290	
Norfolk	39,384	.93	14	.72	.36	2,813	.93	14	.76	.36	2,813	
Northumberland	34,489	.81	11	.58	.32	3,155	.81	11	.60	.32	3,135	
Ontario	71,370	1.68	31	1.62	.43	2,302	1.68	31	1.68	.43	2,302	
Oxford	55,133	1.30	19	.99	.34	2,901	1.30	19	1.03	.34	2,901	
Parry Sound	29,655	.70	5	.26	.17	5,931	.70	5	.27	.17	5,931	
Peel	42,417	1.00	14	.72	.33	3,029	1.00	14	.76	.33	3,029	
Perth	50,515	1.19	21	1.09	.42	2,405	1.19	20	1.08	.40	2,526	
Peterborough	56,706	1.33	25	1.30	.44	2,268	1.33	25	1.35	.44	2,268	
Prescott	25,011	.59	3	.16	.12	8,337	.59	3	.16	.12	8,337	
Prince Edward	18,097	.43	5	.26	.28	3,619	.43	5	.27	.28	3,619	
Rainy River	21,576	.51	3	.16	.14	7,192	.51	3	.16	.14	7,192	
Renfrew	57,654	1.36	16	.83	.28	3,603	1.36	13	.70	.23	4,435	
Russell	18,116	.43	1	.05	.06	18,116	.43	1	.05	.06	18,116	
Simcoe	97,202	2.28	42	2.18	.43	2,315	2.28	40	2.17	.41	2,430	

*Includes those in federal agencies and those not in active practice.

**Does not include those in federal agencies.

TABLE D1 (Cont'd)

County	DENTISTS REG'D WITH THE ROYAL COLLEGE OF DENTAL SURGEONS IN ONTARIO at December 31, 1948*						DENTAL SURGEONS FUND BY SURVEY TO BE IN ACTIVE PRACTICE IN ONTARIO at December 31, 1948**				
	Estimated Population 1948	% of Populations	Number of Dentists	% of Total Dentists	Dentists per 1, 000 of Population	Number of Persons Served by One Dentist	% of Population	Number of Dentists	% of Total Dentists	Dentists per 1, 000 of Population	Number of Persons Served by One Dentist
Stormont	47,738	1.12	12	.62	.25	3,978	1.12	12	.65	.25	3,978
Sudbury	100,944	2.37	26	1.36	.26	3,882	2.37	26	1.41	.26	3,882
Thunder Bay	107,781	2.53	32	1.68	.30	3,368	2.53	32	1.73	.30	3,368
Timiskaming	53,513	1.26	15	.78	.28	3,568	1.26	15	.81	.28	3,568
Victoria	25,724	.60	12	.62	.47	2,145	.60	11	.60	.43	2,339
Waterloo	113,681	2.67	50	2.60	.44	2,274	2.67	50	2.71	.44	2,274
Welland	115,579	2.72	35	1.83	.30	3,302	2.72	34	1.84	.29	3,399
Wellington	62,958	1.48	26	1.35	.41	2,421	1.48	26	1.41	.41	2,421
Wentworth	241,624	5.68	110	5.73	.46	2,196	5.68	109	5.90	.45	2,217
York	1,067,630	25.09	745	38.80	.70	1,433	25.09	714	38.68	.67	1,495
Total	4,255,626	100.00	1,920	100.00	.45	2,216	100.00	1,846	100.00	.43	2,305
*Includes those in federal agencies and those not in active practice. **Does not include those in federal agencies											

TABLE D2

Age Groups	DISTRIBUTION BY AGE GROUP OF THOSE HOLDING DENTAL DEGREES IN ONTARIO at December 31, 1948*												DENTISTS IN ACTIVE PRACTICE BY AGE GROUP AND COUNTY at December 31, 1948**											
	20 to 24	25 to 29	30 to 34	35 to 39	40 to 44	45 to 49	50 to 54	55 to 59	60 to 64	65 and over	age not stated	TOTAL	20 to 24	25 to 29	30 to 34	35 to 39	40 to 44	45 to 49	50 to 54	55 to 59	60 to 64	65 and over	age not stated	TOTAL
County																								
Algoma	-	5	1	1	-	1	3	3	1	1	-	16	-	5	1	1	-	1	3	3	1	1	-	16
Brant	-	-	2	1	3	5	5	2	5	3	1	27	-	-	2	1	3	4	5	2	5	3	1	26
Bruce	-	-	-	1	1	2	6	4	-	3	-	17	-	-	-	1	1	2	6	4	-	3	-	17
Carleton	1	2	13	11	17	15	25	11	6	15	-	116	1	1	11	7	14	13	20	11	6	15	-	99
Cochrane	1	1	4	3	3	3	5	-	-	-	-	20	1	1	4	3	3	3	5	-	-	-	-	20
Dufferin	-	-	-	-	1	1	-	1	1	1	1	6	-	-	-	-	1	1	-	1	1	1	1	6
Dundas	-	-	-	-	-	2	2	1	2	-	-	9	-	-	-	-	-	2	2	1	2	-	-	9
Durham	-	2	-	-	1	-	3	1	1	4	-	12	-	2	-	-	1	-	3	1	1	4	-	12
Elgin	-	-	-	3	1	3	7	2	-	1	-	17	-	-	-	3	1	3	7	1	-	1	-	16
Essex	1	5	6	-	6	15	15	9	-	7	-	64	1	5	6	-	6	14	15	9	-	7	-	63
Frontenac	-	3	1	2	2	3	7	5	3	1	-	27	-	3	1	2	1	2	4	5	3	1	-	22
Glengarry	-	-	-	-	-	-	-	3	-	1	-	4	-	-	-	-	-	-	-	3	-	1	-	4
Grenville	-	1	-	-	-	-	2	-	2	-	-	5	-	1	-	-	-	-	2	-	2	-	-	5
Grey	-	1	2	2	1	1	8	1	2	4	1	23	-	1	2	2	1	1	8	1	2	3	1	22
Haldimand	-	-	-	2	-	1	3	-	1	-	-	7	-	-	-	2	-	1	3	-	1	-	-	7
Haliburton	-	-	-	-	1	-	-	-	-	-	-	1	-	-	-	-	1	-	-	-	-	-	-	1
Halton	-	1	2	-	1	1	8	-	1	2	-	16	-	1	2	-	1	1	8	-	1	2	-	16
Hastings	1	-	3	2	2	3	6	2	3	8	-	30	1	-	3	2	1	3	5	2	3	8	-	28
Huron	-	-	1	2	3	1	5	1	-	3	-	16	-	-	-	2	3	1	5	1	-	3	-	15
Kenora & Pat.	-	1	-	2	1	2	1	1	1	-	-	9	-	1	-	2	1	2	1	1	1	-	-	9
Kent	-	1	3	3	2	4	6	3	-	6	-	28	-	1	3	3	2	4	6	3	-	6	-	28
Lambton	-	2	1	3	-	8	5	1	1	5	-	26	-	2	1	3	-	8	5	1	1	5	-	26
Lanark	-	-	1	-	-	4	4	2	-	1	-	12	-	-	1	-	-	4	4	2	-	1	-	12
Leeds	1	-	-	1	3	3	4	1	-	-	-	13	1	-	-	1	3	3	4	1	-	-	-	13
Lennox & Add.	-	-	1	-	-	1	1	1	-	1	-	5	-	-	1	-	-	1	1	1	-	1	-	5
Lincoln	-	5	4	3	1	5	3	6	1	6	1	35	-	5	4	3	1	5	3	6	1	6	1	35
Manitoulin	-	-	-	-	-	-	-	1	-	1	-	2	-	-	-	-	-	-	-	1	-	1	-	2
Middlesex	3	3	5	6	6	8	18	10	2	5	1	67	3	3	5	6	6	6	16	10	2	5	-	62
Muskoka	-	-	1	1	-	2	3	-	1	-	-	8	-	-	1	1	-	2	3	-	1	-	-	8
Nipissing	-	-	1	1	-	3	2	1	-	1	-	9	-	-	1	1	-	3	2	1	-	1	-	9
Norfolk	1	1	2	1	3	-	2	2	-	2	-	14	1	1	2	1	3	-	2	2	-	2	-	14
Northumberland	-	3	1	1	-	3	-	-	1	2	-	11	-	3	1	1	-	3	-	-	1	2	-	11
Ontario	1	-	2	3	3	5	7	4	3	3	-	31	1	-	2	3	3	5	7	4	3	3	-	31
Oxford	1	-	-	2	2	5	3	3	-	3	-	19	1	-	-	2	2	5	3	3	-	3	-	19
Parry Sound	-	-	1	1	-	1	1	-	1	-	-	5	-	-	1	1	-	1	1	-	1	-	-	5
Peel	-	-	1	1	1	3	5	1	-	2	-	14	-	-	1	1	1	3	5	1	-	2	-	14
Perth	-	2	2	2	2	-	4	4	1	4	-	21	-	2	2	1	2	-	4	4	1	4	-	20
Peterborough	-	2	2	2	2	3	8	3	1	2	-	25	-	2	2	2	2	3	8	3	1	2	-	25
Prescott	-	-	-	-	-	1	-	-	-	2	-	3	-	-	-	-	-	-	1	-	-	2	-	3
Prince Edward	-	-	-	1	-	2	-	-	1	1	-	5	-	-	-	1	-	2	-	-	1	1	-	5
Rainy River	-	-	-	-	1	2	-	-	-	-	-	3	-	-	-	-	1	2	-	-	-	-	-	3
Renfrew	-	-	-	-	5	4	5	1	-	-	1	16	-	-	-	-	4	4	4	1	-	-	-	13
Russell	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	1
Simcoe	-	2	4	3	4	5	10	4	2	7	1	42	-	1	4	3	4	5	10	4	2	7	-	40
Stormont	-	-	1	1	-	6	3	-	-	1	-	12	-	-	1	1	-	6	3	-	-	1	-	12
Sudbury	1	2	1	2	5	4	4	3	4	-	-	26	1	2	1	2	5	4	4	3	4	-	-	26
Thunder Bay	2	1	3	5	2	3	8	2	3	2	1	32	2	1	3	5	2	3	8	2	3	2	1	32
Timiskaming	-	4	-	-	2	3	2	-	2	2	-	15	-	4	-	-	2	3	2	-	2	2	-	15
Victoria	-	1	1	-	-	2	6	-	2	-	-	12	-	1	1	-	-	2	6	-	1	-	-	11
Waterloo	-	5	2	7	4	10	12	4	2	4	-	50	-	5	2	7	4	10	12	4	2	4	-	50

* This includes those in federal agencies and those not in practice at December 31, 1948.

**This does not include those in federal agencies.

TABLE D2 (cont'd.)

Age Groups	DISTRIBUTION BY AGE GROUP OF THOSE HOLDING DENTAL DEGREES IN ONTARIO at December 31, 1948*												DENTISTS IN ACTIVE PRACTICE BY AGE GROUP AND COUNTY at December 31, 1948**											
	20 to 24	25 to 29	30 to 34	35 to 39	40 to 44	45 to 49	50 to 54	55 to 59	60 to 64	65 and over	age not stated	TOTAL	20 to 24	25 to 29	30 to 34	35 to 39	40 to 44	45 to 49	50 to 54	55 to 59	60 to 64	65 and over	age not stated	TOTAL
County																								
Welland	1	3	3	2	1	7	10	3	2	3	-	35	1	3	3	2	1	7	10	2	2	3	-	34
Wellington	1	2	3	1	2	3	6	1	2	5	-	26	1	2	3	1	2	3	6	1	2	5	-	26
Wentworth	-	6	10	9	11	13	29	13	6	13	-	110	-	6	10	9	11	13	28	13	6	13	-	109
York	15	66	71	53	85	114	142	74	52	73	-	745	15	63	67	50	83	112	136	68	50	70	-	714
Total	31	133	162	147	191	295	424	196	120	213	8	1,920	31	128	155	139	183	286	405	188	117	209	5	1,846
* This includes those in federal agencies and those not in practice at December 31, 1948. **This does not include those in federal agencies.																								

The Survey Committee's study produced the following information:

Dentists in Active Practice--

	Full Time	Part Time	Total
General Practice	1,643	139	1,782
Specialists	60	4	64
			1,846
Dentists in Other Than Active Practice--			74
			1,920

Those not in the active practice of dentistry, totalling 74, are accounted for under classifications including administrative, teaching and research, governmental and dental public health services.

Those in part-time employment and in selected fields are shown in Tables D3 and D4. Certified specialists in the province, numbering 64, are shown in Table D6, according to the specialty and the location. It is interesting to note that in Ontario, only one specialist is located outside of cities of 32,000 population or over.

Information secured by the Committee's survey shows that 214 dentists are employed part time in the schools of the province as follows:

42	spend more than 10 hours per week	
9	" 7 - 10 hours	" "
25	" 4 - 6 "	" "
66	" 1 - 3 "	" "
72	" less than one hour	" "

214 total

It has also been found that 54 dentists are giving service part time in public health as follows:

15	are employed more than 10 hours per week	
1	is "	7 - 10 " " "
5	are "	4 - 6 " " "
15	" "	1 - 3 " " "
18	" "	less than one hour " "

54 total

In general hospitals, 36 dentists are employed part time as follows:

1	is employed more than 10 hours per week.	
2	are "	" 7 - 10 " "
4	" "	" 4 - 6 " "
10	" "	" 1 - 3 " "
19	" "	less than one hour " "

36

In teaching part time, 68 dentists are employed more than 10 hours per week.

This does not mean that 372 individual dentists are employed part time in these fields; the same dentist may be engaged part time in two or more fields.

A breakdown by regions is shown in Table D3.

Auxiliary Personnel

According to information received by the Survey Committee from 1,083 dentists, 83 per cent of them employ either dental nurses or assistants, 74 per cent employing them full time. In 1943, the

TABLE D3

NUMBER OF DENTISTS EMPLOYED PART-TIME IN SELECTED FIELDS SHOWING TIME SPENT

		TIME PERIOD					Total Number
		less than 1 hour	1 - 3 hours	4 - 6 hours	7 - 10 hours	10 hours plus	
Region 1	Public Health	1	5	1			7
	Schools	17	13	5	2	6	43
	General Hospitals	3	2				5
Region 2	Public Health	5	4	2		3	14
	Schools	9	6	6	2	6	29
	General Hospitals	2					2
Region 3	Schools	26	36	10	5	29	106
	Public Health	6	4	1	1	12	24
	General Hospital	14	6	1	1	1	23
	Teaching					68	68
Region 4	Schools	6	2	2			10
	Public Health	2	2	1			5
	General Hospitals			2			2
Region 5	Schools	6	2	1			9
	Public Health		2	1	1		4
Region 6	Schools	4	7	1		1	13
	Public Health	4					4
Region 7	Schools	4					4

TABLE D4

CERTIFIED SPECIALISTS AS OF DECEMBER 31ST, 1948

	Pedodontia	Oral Surgery	Orthodontics	Periodontia	Total
Toronto	2	17	14	8	41
Kitchener			1		1
London		2	2	2	6
Hamilton		2	2	1	5
Kingston			1		1
Ottawa		3	3	2	8
Windsor			1		1
Grimsby Beach		1			1
Totals	2	25	24	13	64

Royal College of Dental Surgeons made a survey of dentists in Ontario. At that time only 53.9 per cent employed an assistant of any kind. While the situation may have changed considerably, the committee has no reason to believe that it has altered to this extent. It is possible that a large percentage of those who failed to answer this question do not engage the services of dental nurses or assistants.

Of the dentists replying, 453 expressed opinions regarding additional auxiliary personnel. Of these, 203 suggested the need for dental hygienists, 231 indicated that more nurses, assistants, or additional personnel are required in order that the practitioner may give more adequate dental care.

Many dentists in active practice look upon the employment of the assistant, hygienist or nurse as a valuable means of providing more adequate service to the public through more productive dentist hours. However, it has been noted that there still remains a large number of practitioners who apparently do not make the best use of their auxiliary staff in the delegation of duties.

By the employment of technicians or the services of a registered laboratory, much

time-consuming work can be delegated on written prescription. Of the 1,083 dentists providing detailed information to the Survey Committee, 87 per cent use the services of a dental laboratory; 13 per cent employ laboratory technicians.

Under the Dental Technicians Act of 1946, a dental technician operating a dental laboratory must have a license from the Board appointed by the Lieutenant-Governor in Council to administer the regulations of the Act. Two hundred and fifty dental technicians are licensed to operate dental laboratories in Ontario, and they employ other technicians who, thus employed, are not required to be licensed.

The practice of preventive dentistry, and especially dentistry for children, requires a minimum, if any, prosthetic dentistry, but it does require chair-side assistance and time given to instruction and counselling, which the dental hygienist or dental nurse can be trained to do effectively. Time now given to training dental nurses in dental technology could be used to better advantage for courses of training in preventive and control procedures, which would enable them to give health instruction and counselling as it relates to dental health.

CHART D1
DENTISTS IN ONTARIO
BY FIVE-YEAR AGE GROUPS
IN 1948

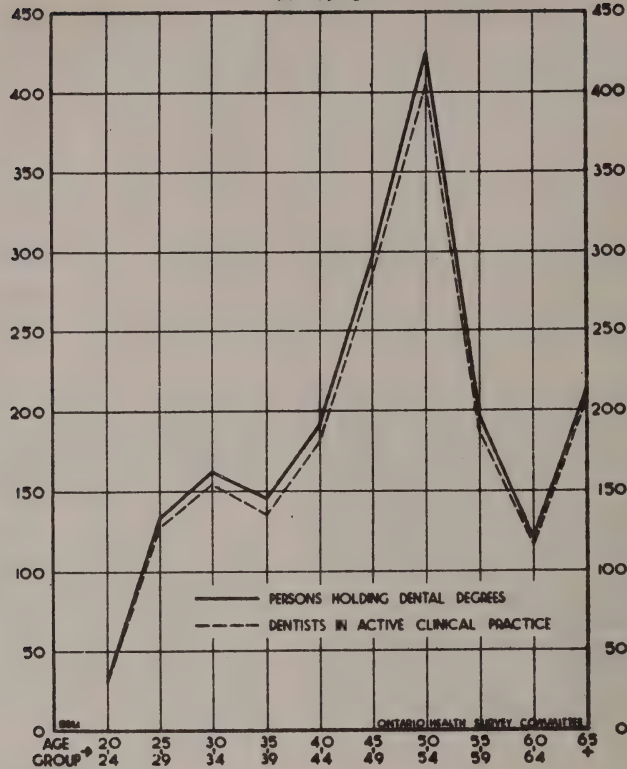
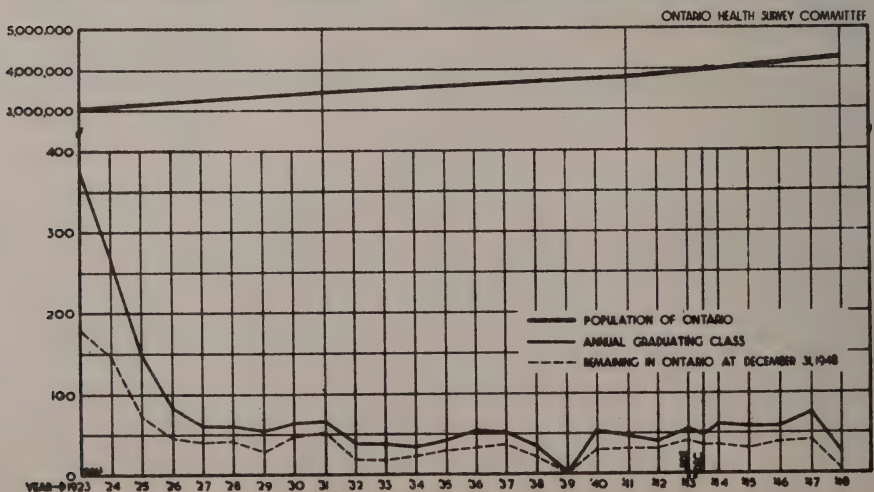


CHART D2
DENTAL GRADUATES UNIVERSITY OF TORONTO 1923-1948;
ACTUAL NUMBER REMAINING IN ONTARIO ON DECEMBER 31 1948



CHAPTER II

ASSESSMENT OF DENTAL HEALTH

The population where it seemed most feasible to make an assessment of dental conditions, and where some information was already recorded, was the school population. With few exceptions, the only standardized records available to the committee were those found in urban school areas. It was necessary, therefore, to secure similar standardized dental records from rural school populations. A subcommittee was set up to study the requirements and recommend sample areas which would show dental conditions in a cross section of the Ontario rural school areas. Townships representing five of the seven hospital regions were chosen for the rural part of this dental survey. Map D2 shows the sample areas in Peel, Parry Sound, Manitoulin, Thunder Bay and Dundas counties.

Having requested and received permission to use records from Welland, East York-Leaside, Ottawa and Sudbury urban schools, similar dental records and recapitulation sheets were used in the rural areas.

In all, 80 schools were examined in rural Ontario. The dental examinations were made by dentists engaged by the Survey Committee and trained in the use of the standardized record, and a standardized form was designed and used for taking off the information. The findings have been reduced to tabular form in Tables D5, D6, and D7. It will be noted that this constitutes a "prevalence report" of dental conditions, and indicates the dental conditions found within the school population at the time of the examination.

Records of 19,361 children, ranging in age groups from five to 15 years, were secured (see Table D7). The condition in each individual sample population is shown, and the percentage distribution of children with certain dental conditions is indicated. Those children "having no dental care" range from a high of 71 per cent in Sample C to a low of 26.9 per cent in Sample A.

It will be seen that the percentage of the total sample school population having no dental care ranges from 61.74 per cent among five-year-olds down to 24.12 per cent among 15-year-olds. It will be noted that 87.5 per cent of rural five-year-olds have no dental care. It will also be noted that neglect of dental care in five to eight-year-olds in rural school population samples is very marked, all being above 60 per cent. However, in the urban school population, ages 5 to 12, the total samples are all above 50 per cent with "no dental care".

Table D5 shows that the percentage of those having "dental defects" ranges from a high of 95.6 per cent in Sample D to a low of 66.1 per cent in Sample I.

Those who now require some form of orthodontic service to correct an abnormal relationship of teeth, range from 47.9 per cent in Sample B to a low of 18.8 per cent in Sample D. The high percentages may be attributable to bad oral habits, premature loss of deciduous teeth, or the result of dental disease and neglect. In many instances these conditions could have been prevented by the education and counselling of parents, and the early supervision of the child's dental care by the dentist.

Oral hygiene is shown on Table D6 and includes a record of the children who have a toothbrush. It will be seen in this table that although the percentage of rural children who reported having toothbrushes is slightly higher than among urban children, those considered to have "good oral hygiene" among the rural children are, in the majority of age groups, a much lower percentage than those in the urban population. This seems to indicate a lack of sufficient dental health education directed toward the parent, and little supervision in the proper use of the toothbrush. Education could improve the oral hygiene of both urban and rural group materially.

Abnormal relationships of cuspid and first molar teeth, which indicate the beginning or progression of a condition which will eventually require orthodontic treatment if not intercepted in the early stages, are shown in Table D6. Alongside that are shown percentages of children who already have indications of orthodontic needs. It will be noted that only 5.06 per cent of rural six-year-olds, and 7.01 per cent of urban six-year-olds, need orthodontic service. This percentage rises rapidly to 34.29 per cent in rural 15-year-olds and 62.1 per cent in urban 15-year-olds. Education of parents regarding the need for early dental supervision, and early interception by the dentist, could prevent most of this unfortunate condition.

Table D6 also shows the great need of space maintenance as a precaution against malocclusion and abnormal growth pattern. It is seen that 37.5 per cent of rural five-year-olds need space maintenance service because of the premature loss of deciduous teeth. In the lower age groups, the rural percentage is somewhat higher, which would indicate that rural children in these age groups had, for the most part, extractions only, and little re-

storative care. The lack of this service will be contributory to future abnormal tooth relationship and resultant interference with normal chewing. This could be prevented. The education of parents as to the value of maintaining these deciduous teeth, and the need for dental supervision as early as two and one-half years, would help to prevent this situation from developing.

In this survey, records were kept of a nutritional habit of taking sweet foods as a bedtime snack. This is shown for each total sample in Table D5 and in Table D6, by age and area (rural, urban).

It is interesting to note that 50 per cent of five-year-old rural children have sweet bedtime-snack habits, and this is reduced to 28.57 per cent among rural 15-year-olds. There exists a different pattern of nutritional habits in urban school populations; five-year-olds are lower than rural--beginning at 34.74 per cent, but there is an increase to 60.9 per cent among urban 15-year-olds.

It is believed that this habit does contribute to the incidence of dental caries and may be accumulative to a greater degree where the largest percentage of those with bedtime-snack habits is among the lower age groups, in the rural population. This may account, to some degree, for the higher rate of 472 cavities per 100 children in the rural population as against 357 per 100 children in the urban population as shown in Table D7.

Table D7 would indicate that while there is a higher cavity prevalence among rural children,

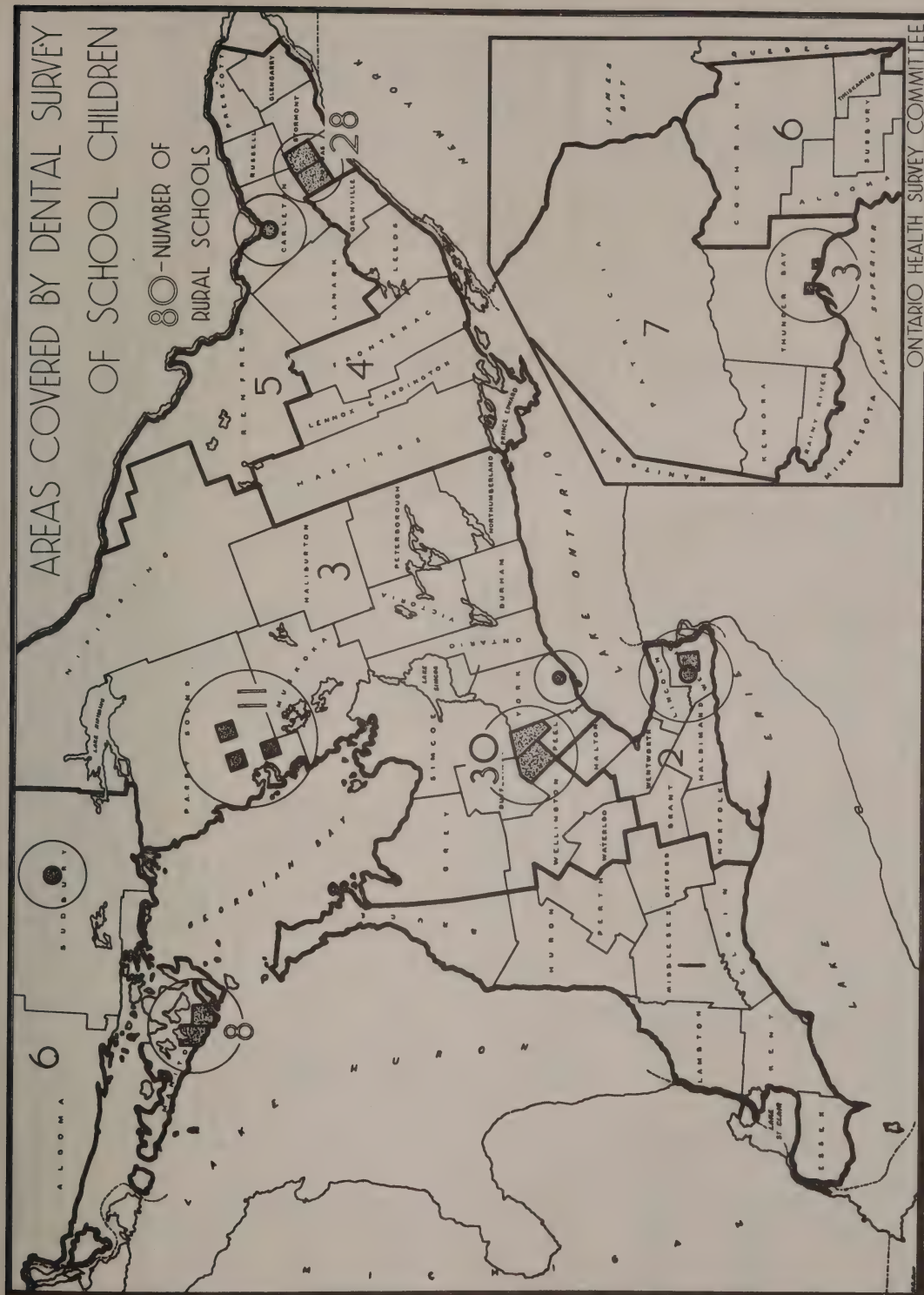
there exists a considerably lower rate of 158 fillings per 100 children as compared with a rate of 197 fillings per 100 children among urban populations. Comparisons of the prevalence of deciduous teeth lost prematurely shows 65 per 100 children for urban as against 35 per 100 children in rural areas. But, deciduous teeth "to be extracted" in 66 per 100 children in the rural population as compared with 29 per 100 children in urban areas.

The sample population shown as Sample I (Table D5) is the only school population where a program of dental health education, counselling, and regular annual notification of parents regarding their children's dental condition has been carried out for several years previous to this study. Of the nine samples, this school population is the lowest in "dental defects"; second lowest having "no dental care"; third lowest among those taking "bedtime snacks"; second lowest with "cavities"; highest with those having "fillings"; and the lowest among those "requiring extractions". The influence of this educational program seems evident.

Another observation made by dental examiners of the rural school population was the lower prevalence of caries in the schools where access to candy, confections, and soft drinks was obviously more difficult. The better dental conditions in schools remote from towns and villages were easily discerned. Teachers in villages and in schools close to town complained about the practice of the children bringing candy, soft drinks and gum to school, and the results seemed evident in terms of dental caries.

VERED BY DENTAL SURVEY OF SCHOOL CHILDREN

88-NUMBER OF RURAL SCHOOLS



ONTARIO HEALTH SURVEY COMMITTEE

TABLE D5 - SUMMARY OF RESULTS OF DENTAL SURVEY AMONG 19,361 ONTARIO SCHOOL CHILDREN IN NINE* GEOGRAPHIC AREAS 1948

Population Sample	% Receiving No Dental Care	% with Dental Defects	Oral Hygiene Condition		% with Diseased Gums	% with Nutritional Habits Causing Tooth Decay	
			% Good	% Fair			
(A- 756 (B- 188 RURAL (C- 231 (1,853) (D- 138 (E- 540	26.9 56.4 71.0 38.4 47.8	93.4 94.6 93.5 95.6 91.3	28.3 6.9 19.5 18.1 21.1	65.0 86.2 74.5 74.6 75.4	9.7 2.1 2.6 2.9 2.0	22.3 48.4 61.5 72.4 58.7	
(F-6,453 URBAN (G-6,500 (17,508) (H-2,490 (I-2,065	44.9 28.7 36.8 28.6	91.7 83.4 87.7 66.5	2.2 60.3 13.0 44.0	92.4 31.3 45.1 51.0	9.8 2.2 1.4 3.6	45.6 62.8 56.2 48.1	
Improvement may be effected by:	Education; more available services.	Education; early care.	Education only.		Education, counselling.	Education; counselling.	
Population Sample	In Need of Orthodontic Care	Habits Contributory to Orthodontic Conditions	Needing Space Maintenance	Having Fillings	Having Cavities	Teeth Lost Prematurely	Requiring Extractions
(A) 21.9 (B) 47.9 RURAL (C) 21.2 (D) 18.8 (E) 21.3	9.4 15.3 9.5 5.0 8.1	14.5 9.5 10.8 10.1 5.0	47.7 26.0 17.3 38.4 38.5	87.5 93.0 92.2 94.9 90.1	36.5 36.7 33.8 39.9 12.8	36.7 37.2 35.1 31.1 35.5	
(F) 33.3 (G) 22.5 (H) 27.5 (I) 39.8	8.7 1.3 4.2 10.6	14.2 3.6 5.4 6.8	43.1 24.7 30.9 66.8	86.4 62.4 74.5 66.1	40.6 22.6 46.3 24.0	23.4 13.0 23.3 8.6	
Improvement may be effected by:	Education; early regular dental care.	Education; counsel to parents.	Education; early dental care.	Education; counsel; preventive care.		Education; counsel; early preventive care.	

*Description of areas surveyed: A - Part of Peel county, southern Ontario, dental services nearby.
 B - Part of Parry Sound district, mid-northern Ontario; relatively remote from dental services.
 C - Part of Manitoulin Island, northern Ontario, isolated from dental services.
 D - Part of Thunder Bay District, northern Ontario; insufficient dental services.
 E - Part of Dundas county, eastern Ontario; dental services nearby.
 F - Welland and district, southern Ontario; dental services available.
 G - Sudbury, northern Ontario city; dental services available.
 H - Part of the city of Ottawa, eastern Ontario; dental services available.
 I - Part of Leaside and East York, suburban southern Ontario; dental services available with a public health program in effect for five years preceding survey.

N. B. -In this survey teeth with adequate fillings were not counted as defective.

TABLE D6

DENTAL CONDITIONS FOUND AMONG SAMPLE OF 19,361 ONTARIO SCHOOL CHILDREN

PERCENTAGE BY AGE AND RURAL OR URBAN AREA

AGE	HAVING NO DENTAL CARE		HAVING A TOOTH BRUSH		ORAL HYGIENE GOOD		ORAL HYGIENE POOR	
	Rural	Urban	Rural	Urban	Rural	Urban	Rural	Urban
5	87.50	61.12	90.63	95.54	31.25	31.57	-	5.73
6	71.91	56.73	96.07	91.28	25.84	38.13	2.81	6.97
7	60.55	58.09	93.58	91.94	25.23	33.80	4.13	33.80
8	62.07	58.84	94.40	93.04	15.95	29.14	5.17	15.36
9	45.45	57.15	96.65	94.55	14.83	27.08	5.74	15.35
10	35.04	56.45	99.57	95.49	23.93	28.19	2.56	14.65
11	26.39	57.91	98.48	95.19	22.84	29.91	7.11	13.37
12	21.92	56.76	97.72	94.89	23.74	28.38	5.48	11.80
13	24.31	48.53	100.00	95.05	24.86	30.06	9.39	12.34
14	18.34	44.08	99.08	95.54	21.10	23.55	12.84	11.72
15	22.86	24.20	97.14	95.43	28.57	13.03	14.29	7.44
AGE	WITH ABNORMAL CUSPID AND MOLAR RELATIONSHIP		WITH ORTHODONTIC REQUIREMENTS		REQUIRING SPACE MAINTENANCE		WITH THE BEDTIME SNACK HABIT	
	Rural	Urban	Rural	Urban	Rural	Urban	Rural	Urban
5	-	14.62	-	7.23	37.50	11.83	50.00	34.74
6	6.74	14.02	5.06	7.01	28.40	11.42	42.70	46.30
7	11.47	18.68	11.47	11.16	25.23	18.13	42.20	45.97
8	12.07	22.23	15.09	13.32	16.81	15.96	44.83	51.93
9	15.31	30.28	23.92	17.92	12.92	10.01	48.80	53.69
10	23.50	33.41	26.92	21.40	4.70	2.75	43.59	55.98
11	20.30	39.13	24.37	26.55	0.51	0.53	47.71	60.80
12	30.14	50.27	28.77	31.10	0.91	0.13	42.92	62.53
13	33.70	56.76	32.04	36.94	-	-	46.41	62.55
14	37.61	63.84	29.36	43.30	-	0.11	29.36	66.18
15	34.29	72.76	34.29	62.10	-	-	28.57	60.91

TABLE D7

**ACTUAL COUNT OF DENTAL CONDITIONS FOUND
IN SAMPLE SCHOOL POPULATIONS EXAMINED**

Sample	Number of Children Examined	Cavities	Fillings	Teeth Prematurely Lost		Teeth to be extracted	
				Deciduous	Permanent	Deciduous	Permanent
Rural							
A	756	2,919	1,427	314	194	517	50
B	188	1,173	174	97	80	115	17
C	231	1,188	169	88	60	146	20
D	138	918	245	97	42	74	12
E	540	2,560	920	60	47	301	21
Totals Rural	1,853	8,758	2,935	656	423	1,153	120
Per 100 Children		472	158	35	22	62	6
Urban							
F	6,453	26,154	12,908	2,951	2,843	2,232	694
G	6,500	20,181	10,901	3,882	2,180	1,868	730
H	2,490	10,566	3,090	3,529	342	726	58
I	2,065	5,656	7,568	1,005	180	222	14
Totals Urban	17,508	62,557	34,467	11,367	5,545	5,048	1,496
Per 100 Children		357	197	65	32	29	8
Totals All Samples	19,361	71,315	37,402	12,023	5,968	6,201	1,616
Per 100 children		368	193	62	31	32	8

CHAPTER III

DENTAL PUBLIC HEALTH SERVICES

The auspices under which dental health services are available in Ontario may be classified as governmental and nongovernmental. Dental services paid for wholly, or in part, by the province may be said to involve several departments of government, both provincial and local, and are provided directly or by grants-in-aid to municipalities through the Ontario Department of Health. In some instances, voluntary or nongovernmental agencies pay for dental services in institutions which are under the supervision of government departments.

Governmental Agencies

The Dental Division of the Ontario Department of Health provides either full or part-time dental services in 15 Ontario mental hospitals, 13 sanatoria, six reform institutions, and on one dental car operated on the main lines of a railway in northern Ontario.

Regulations under the Public Health Act provide public assistance by grants to municipalities who since April 1, 1948, have established dental inspection which must include treatment services. Grants cover 20 per cent of the cost in municipalities of 5,000 population and over, and 30 per cent in rural townships or municipalities under 5,000 population.

The local departments of education in some municipalities provide a dental service on full or part-time staff basis, but provincial grants-in-aid are provided through the Department of Health.

When the regulations covering dental inspection were laid down, they were designed to meet the necessity for continuing treatment services. There is now a newer concept of prevention and a more positive approach to health problems, which involves the education of the public in matters relating to dental health.

In institutions under the supervision of the Department of Welfare, such as the Children's Aid Society, Homes for the Aged, and those classed as charitable institutions, dental services are the responsibility of the municipality, or are provided by voluntary agencies.

The "Homes for the Aged" have no clinics for their dental needs, but in some cases services are provided for county and district homes and those classed as "charitable institutions". Because of their condition, the aged and infirm are often unable to attend at private offices or clinics.

The Workmen's Compensation Board, appointed by the provincial government, makes dental services available to workmen who have met with accidents. The required services are provided by practicing dentists on a "fee for service" basis, with a referee appointed by the Royal College of Dental Surgeons acting in an advisory capacity to the board. Expenditures for this service in 1948 amounted to \$24,252.20.

On the municipal level, certain dental services are provided by local Boards of Health. In some instances, grants-in-aid may be provided through the Department of Health of the province. In others, the municipalities provide the services out of taxation funds.

Nongovernmental Agencies

Dental services available under non-governmental auspices are provided by voluntary agencies such as the Ontario Division, Canadian Red Cross Society. Red Cross programs of dental service are of two types:

1. Dental health educational programs in the form of the Welland project within a health unit area. A similar program was sponsored in Sudbury and in Ottawa. Local Red Cross branches in other communities have provided dental health education to the community, and sponsored pre-school and school dental health programs.
2. The other type is that in districts remote from dental services, where education and treatment services are taken into the area. Two trailer coaches, completely equipped and with staff living aboard, provide dental care for the children. The Red Cross finances this work, and its dental budget, apart from the work of local branches, amounted to approximately \$30,000 in 1948.

The Independent Order of the Daughters of the Empire has made dental services available in its convalescent home for tubercular children, and in 1931 contributed \$5,000 toward equipping the dental railway car which the Dental Division of the Department of Health operates in northern Ontario.

Many service clubs and private agencies have assisted in making dental services available to children who otherwise would not receive much-needed specialized dental care. They have also become interested in dental health education, and

have made funds available for the promotion and maintenance of positive dental health through education.

The personnel engaged in public health dental service in Ontario is specially trained in dental public health. Since the diploma course in dental public health was established at the University of Toronto in 1945, 13 candidates have had this training. Four of them are directing government departments in Canada, six are directing programs under health units or municipal departments of health auspices, one is in a teaching appointment, and one at medical school. The six directors of local programs were all in Ontario at the time of this survey, serving under full-time appointment, either in health units or local departments of health. One of these is under the direction of the Ontario Department of Education.

Other programs of school dental services are carried on by dentists employed part time, either in school clinics or in their own offices under contract. The latter give most of their time to treatment only, and the extent of their employment is included in Table D3.

As has been previously pointed out under that section having to do with the auspices of public health services, programs under these various agencies differ greatly. Programs can be classified under two main headings, first, those giving subsidized dental treatment, either in school clinics

or in private offices under contract, and secondly, those with a program of dental public health education, whereby preventive procedures are taught to both children and parents. In some school services there exists a combination of the two programs, i.e., a dental public health education program, directed by a full-time dentist trained in public health, and treatment services made available in local dental offices under contract through the local Boards of Health or Education and paid for by local Boards of Health with the assistance of grants from the provincial government. In order to provide a sound preventive educational program, with its periodic examination and counselling of the school children by a dentist, funds must be obtained from local or federal sources, but no grant is available through the Ontario Department of Health, Dental Division, without the inclusion of dental treatment.

Dental treatment grants amount to 20 per cent of the cost in urban municipalities, and 30 per cent in rural areas. The balance of the costs must be met by the municipality. Table D8 comprises a schedule of the school dental services and grants for 1948 by the Dental Division of the Department of Health. It is pointed out that no information is given regarding the number of children receiving dental care or the type of dental service rendered, and this is not available from the records of the Dental Division of the Department of Health. It would seem advisable that this information should be recorded by the department.

TABLE D8

SCHOOL DENTAL SERVICE - 1948

Place	School* Population of County	Approximate Number of Hours of Service	Approximate Cost	Approximate Grant
<u>Bruce County</u>	7,093			
Albemarle Twp.		38	\$164.66	\$49.40
Chesley Town		8	33.66	10.10
Elderslie Twp.		134	526.99	158.10
Huron Twp.		172	574.94	172.48
Kincardine Twp.		88	293.50	88.05
Kinloss Twp.		203	542.00	162.60
Lindsay Twp.		31	136.42	40.93
Lucknow Village		79	265.00	79.50
Ripley Village		145	487.00	146.10
Saugeen Twp.		97	391.00	117.30
Wiarton Town		145	580.66	174.20
<u>District of Cochrane</u>	16,333			
Timmins Town		289	1,652.00	330.40
<u>Dufferin County</u>	2,330			
Melancthon Twp.		100	441.25	132.37
Mono Twp.		284	1,280.80	384.24
Mulmur Twp.		26	116.00	34.79
<u>Essex County</u>	17,751			
Tecumseh Town		90	300.00	90.00
<u>Grey County</u>	7,586			
Artemesia Twp.		5	22.50	6.75
Bentinck Twp.		158	630.83	189.25
Chatsworth Village		64	308.00	92.40
Glenelg Twp.		87	345.00	103.50
Holland Twp.		108	608.92	182.67
Keppel Twp.		183	878.41	263.52
Osprey Twp.		44	176.00	52.80
Sullivan Twp.		265	1,315.95	394.78
Sydenham Twp.		212	965.18	289.56
<u>Halton County</u>	5,286			
Esquesing Twp.		82	330.00	98.84
Nassagaweya Twp.		194	776.00	232.80
Nelson Twp.		76	306.50	91.95
Trafalgar Twp.		283	1,132.00	339.60
<u>Hastings County</u>	9,337			
Tyendinaga Twp.		9	36.50	10.95
<u>Huron County</u>	6,996			
Wawanosh East Twp.		167	832.00	249.60
<u>Lanark County</u>	6,013			
Ramsay Twp.		12	48.00	14.40
<u>Leeds & Grenville County</u>	9,289			
Brockville Town		40	600.00	120.00
Prescott Town		8	37.50	11.25

*These are totals of school populations, and not the number of children examined.

TABLE D8 (Cont'd)
SCHOOL DENTAL SERVICE - 1948 (cont'd.)

Place	School * Population of County	Approximate Number of Hours of Service	Approximate Cost	Approximate Grant
<u>Middlesex County</u>	10,500			
Westminster Twp.			\$1,272.38	\$381.72
<u>Norfolk County</u>	6,900			
Woodhouse Twp.		114	577.00	173.10
<u>Peel County</u>	6,109			
Brampton Town		675	3,942.53	788.51
<u>Prescott & Russell County</u>	8,810			
Casselman Village		88	597.60	179.27
Russell Twp.		23	71.00	21.30
<u>Rainy River District</u>	3,628			
Fort Frances Town			163.00	32.60
<u>Simcoe County</u>	15,634			
Beeton Village		30	120.00	36.00
Bradford Village		127	510.40	153.12
Essa Twp.		135	677.50	203.25
Flos Twp.		34	137.00	41.10
Gwillimbury West Twp.		326	905.50	270.85
Medonte Twp.		30	89.50	26.85
Orillia Town			1,436.22	287.24
Orillia Twp.		587	1,768.00	530.40
Tecumseh Twp.		80	323.00	96.90
<u>Temiskaming District</u>	10,060			
Teck Twp.			2,000.00	600.00
<u>Waterloo County</u>	9,644			
Hespler Town		18	60.00	18.00
<u>Wellington County</u>	8,174			
Elora Village		173	693.00	207.90
Peel Twp.		64	260.99	78.30
<u>York County</u>	76,224			
Gwillimbury East Twp.		63	254.00	76.20
King Twp.		167	667.00	200.10
Sutton Village		247	990.00	297.00
York North Twp.			6,216.96	1,000.00
East York-Leaside Unit		1,044	6,707.73	2,012.32
<u>Cities</u>				
Galt	2,092	297	1,485.00	297.00
Guelph	3,336		3,162.08	632.41
Kingston	4,452	375	1,875.00	375.00
North Bay	2,832	243	1,215.00	243.00
Ottawa	19,981		4,349.56	869.91
Peterborough	4,578		4,643.38	928.67
St. Catharines-Lincoln Unit	4,870		5,015.57	1,003.12
Woodstock	1,735	151	505.00	101.00

*These are totals of school population, and not the number of children examined.

CHAPTER IV

DENTAL PUBLIC HEALTH EDUCATION

There were 13 dental public health graduates engaged in public health work in Ontario at the time of this survey.

A program of dental health education under a dentist trained in public health was introduced in the Welland and District Health Unit in 1946. Annual examination of the preschool and complete school population is being carried out, and will form the basis of a demonstration program directed toward the maintenance of positive dental health through education. This is a continuous program, directed toward the public, to improve the dental health of the community. This demonstration project was sponsored by the Ontario Division of the Canadian Red Cross Society.

Well-baby and preschool conferences are held under this program, and parent and child counselling in dental health is carried out. Addresses, radio presentations, press releases, and visual aids to education are used to bring the values of a preventive program to the public. Voluntary lay organizations are included in the community organ-

ization to plan and carry out this community dental public health program. Similar programs are now being carried out in two other health units and in two municipal departments of health by men trained in dental public health. In some other communities dentists give part time to dental public health education.

The materials available for the purpose of dental health education were reviewed. This showed a need for development of Canadian material for this purpose. Visual aid material, properly graded for the age level where it can be used most effectively, is needed. This includes films, filmstrips, graded booklets, poster, pamphlets, recordings, etc.

In "A Dental Public Health Plan for Ontario", submitted to the Survey Committee, it is recommended that the dental public health personnel collaborate with the Department of Education in the preparation of these aids. This extensive plan is included with other supplemental material submitted to the Minister of Health with this report.

CHAPTER V

DENTAL PERSONNEL TRAINING FACILITIES IN ONTARIO

I. Facilities

Organized dental education in Ontario began nearly 75 years ago. Ontario's only dental school is the Faculty of Dentistry, University of Toronto.

When its present building was erected 40 years ago, the Faculty planned for an average class of 30-40 students. An addition was made immediately after the war of 1914-1918, providing accommodation for a total registration of 50-60 students per year. The floor space in the present building available for all purposes is approximately 55,000 square feet.

Through the 25-year period 1924-1949, the Toronto Faculty records indicate that the average annual overall registration has been 279 students (an average of 56 students per class, including preidental). The graduating class averaged 56 students during the same period.

It is estimated from experience in this dental school that approximately 200 square feet of space is necessary for each student registered in the dental surgery course. This estimate provides space for dental nurses, graduate programs, research facilities, library and administrative offices. With the addition of a course for the training of dental hygienists, perhaps the figure of 200 square feet per undergraduate student should be increased slightly, to say 225 square feet per dental student.

Looking to the future, on this basis the 55,000 square feet of space in the present dental building cannot be expected to accommodate and provide adequate training facilities for more than a total yearly registration of 245 undergraduate dental students, that is, an average of 61 students in each of the four dental years of the course. In addition to the dental students, a class of 25 dental nurses, a maximum of 10 hygienists in each of two years, adequate research and postgraduate facilities, library, museum and office space is included. Some further building alterations will be necessary to house efficiently even this program.

Potential Yearly Output of Dental Personnel in Ontario on the basis of Present Accommodation

Dentists	61
Dental Nurses	25
Dental Hygienists	10
Graduate Students,)	
Specialty Courses, and)	20
D.D.P.H.)	

Relationship of Ancillary Personnel to New Dentists

In view of the demand for dental nurses since the course was established, it is suggested that the profession could absorb at least two nurses for every three graduating dentists. At present only 25 can be registered each year. As to dental hygienists, there is no actual experience upon which to base an estimate, but it is anticipated that one hygienist for each three graduating dentists might be a reasonable ratio until proven otherwise.

No figures are available regarding the yearly needs in the specialty fields or for work in dental public health.

Total Number of New Graduates Expected During the Next Three Years, that is 1950, 1951 and 1952

Dentists	400*
Dental Nurses	75
Dental Hygienists	8 (in 1952)

Personnel and Building Requirements to Meet Future Demands in the Province

With changing circumstances, the need for dental health personnel will change accordingly. Therefore, any figures which are given under this heading are subject to possible revisions.

In order to graduate yearly 100 dentists, 60 dental nurses, and 30-35 dental hygienists, and provide a minimum requirement of 225 square feet per undergraduate student, a new dental building of 90,000 square feet floor space is recommended.

On a percentage basis, the increase in floor space required may be stated as follows:

Personnel Requirement	Number of Yearly Graduates	Total Floor Space
Present-normal	Approx. 60	55,000 sq. ft.
25 per cent increase	75	67,500 " "
50 " " "	90	81,000 " "
75 " " "	105	94,500 " "
100 " " "	120	108,000 " "

(These figures include provision for ancillary personnel.)

*Abnormally large classes due to postwar veterans' education (1950-1970; 1951-1950; and 1952-90).

When considering the increase in physical accommodation for increased classes of dental students, the availability of clinical material and hospital services are important factors. From experience gained during the present period of inflated classes, there is evidence that suitable clinical material is available in the Toronto area to support a dental school with average classes of 120 students.

The availability of teaching personnel must be related to student registration, and again it appears that there is a large reservoir of potential personnel in the Toronto area.

It is considered essential to the soundness of a dental educational program that it should embrace undergraduate education, education at the graduate level, and investigation and research. This triple-link chain of dental education is only as strong as its weakest link.

Finally, financing dental education is a complicated process. A well-balanced, well-integrated program covering education of dentists, dental nurses, dental hygienists, dental specialists, teachers and research personnel is most economical when they are closely integrated. Dental education is a costly form of education, both to the one being educated and to the educator. Large classes, up to a point, reduce this cost proportionately per student.

II. Dental Education Personnel

Before presenting a statement on the present situation in Ontario relative to dental faculty teaching personnel, a brief reference might be made to Dr. Harlen H. Horner's volume entitled, "Dental Education Today", published in 1947 by the University of Chicago Press. The figures quoted below were gathered in a study made by the Council on Dental Education of the American Dental Ass-

ociation. In all, 38 United States' dental schools were included in the study. The total undergraduate student registration in these schools was 8,236 students, with an average of 217 per school, or an average of 54 in each of the four dental years.

A.D.A. Survey - Teachers in Various Categories

Clinical Teachers (38 Schools)

Full-time teachers - average of 10 per school
Half-time teachers - average of 7.1 per school
Part-time teachers - average of 25 per school
(with a load of 120 hours).

Basic Subjects

Full-time teachers - average of 3 per school
Half-time teachers - average of 2 per school
Part-time teachers - average of 13 per school
(with a load of 321 teaching hours).

University of Toronto Faculty of Dentistry - Teachers in Various Categories

Clinical Teachers

Full-time teachers - 5
Half-time teachers - 4
Part-time teachers - 42 (with load of 225 hours).

Basic Subjects

Full-time teachers - 3
Half-time teachers - 1
Part-time teachers - 26 (with load of 225 hours)

Comparison of U.S. Figures with Toronto

An attempt is made below to equate the figures quoted in Dr. Horner's report with those pertaining to the Toronto faculty. For this purpose a teacher giving 1,000 hours of service is considered full-time; 500 hours, half-time; and the part-time teacher's load is stated in each instance.

<u>U.S.</u>	
<u>Clinical</u>	
Full-time - 10 x 1,000 - 10,000 hrs.	60%
Half-time - 7 x 500 - 3,500 "	21%
Part-time - 25 x 120 - 3,000 "	19%
	<u>16,500 hrs.</u>
<u>Basic Science</u>	
Full-time - 3 x 1,000 - 3,000 hrs)	
Half-time - 2 x 500 - 1,000 ")	50%
Part-time - 13 x 321 - 4,173 "	50%
	<u>8,173 hrs.</u>
Total No. of students	217

Observations on Policy at Toronto

The figures for Toronto indicate a tend-

<u>Toronto</u>	
<u>Clinical</u>	
Full-time - 5 x 1,000 - 5,000 hrs.	30%
Half-time - 4 x 500 - 2,000 "	12%
Part-time - 42 x 225 - 9,440 "	58%
	<u>16,440 hrs.</u>
<u>Basic Science</u>	
Full-time - 3 x 1,000 - 3,000 hrs)	
Half-time - 1 x 500 - 500 ")	37%
Part-time - 26 x 225 - 5,840 "	63%
	<u>9,340 hrs.</u>
Total No. of students	478

ency to place the major load on part-time staff.

Perhaps the reason for this is twofold. In the first place, teaching either full-time or half-time is not particularly attractive from a financial standpoint, as compared with private practice. Secondly, there are very few dentists qualified by a course of training in the teaching of their profession. The result is that most of the instructors in dentistry are chosen because of their established clinical ability and not because of their professional standing as teachers or leaders in research.

Future Policy with Respect to Teaching Personnel

Teaching and research should be reciprocating functions. The Faculty of Dentistry, University of Toronto, has embarked upon a definite policy of teacher preparation so that an increasing number of staff will be engaged in teaching-research activity. An examination of the figures already quoted shows that in the United States' schools, 81 per cent of the clinical load is carried by full-time and half-time teachers. In Toronto, 42 per cent of the total clinical load is carried by full-time and half-time teachers. In the basic science field the comparative figures for full-time and half-time are: in the United States 50 per cent, in Toronto, 37 per cent.

It appears to be the opinion at the University of Toronto that 60 per cent of the teaching load, both in the clinical and basic courses, should be carried by full-time or half-time staff who have the clinical ability, a capacity to teach, initiative, and adequate time to engage in or to direct research. Continuity of teaching depends on the full-time and half-time staff. In order to encourage the best men to accept these positions, salaries for these two groups must be attractive. If they are not sufficiently attractive, positions involving full or half-time men may be acceptable only to: (a) those who are not able to achieve success in practice and are willing to accept the remuneration available through an institutional appointment, or (b) a very few whose love for teaching and research makes them less interested in the financial return.

The Dean of the Faculty of Dentistry, University of Toronto, is of the opinion that the part-time staff, who carry the balance (40 per cent) of the teaching load, should be skilled dentists with an enthusiasm for teaching. Their contribution to teaching should be to relate scientific teaching to realistic practice procedures.

The 60-40 per cent ratio suggested above is dependent upon adequate salary being available to attract outstanding full-time and half-time staff. If, on the other hand, salary levels fail to attract the most capable teaching-research staff, then a preponderance of part-time teachers is preferable, with enough full-time staff to carry the administration.

1948-1948 Staff, Faculty of Dentistry, University of Toronto

Full-time staff - 9 (teachers and administrators)

Half-time staff - 5
(Three half days or better per week - 30
(Part time - less than 3 half days a week - 38
Office and Library administration - 9
Technician - 10
Staff Nurses - 14

TOTAL - 115

III. Services

1. Courses Given

The Faculty of Dentistry, University of Toronto, gives the following courses leading to the preparation of dental health personnel:

- (a) Undergraduate course leading to the D.D.S. degree on the basis of successful completion of two years of Arts and Sciences and four years of Dentistry.
- (b) Graduate courses of one year's duration beyond the D.D.S. degree:
 - (i) B.Sc. (Dent.) degree course for training in dental and medical sciences.
 - (ii) Diploma in Dental Public Health course.
 - (iii) Diplomas in Dental Surgery and Anaesthesia, Orthodontics Periodontology, and Pedodontia, leading to possible acceptance for a specialty certificate.
- (c) Graduate courses of two or more years' duration beyond the D.D.S. degree.
 - (i) M.Sc. (Dent.) degree course
 - (ii) Ph.D. degree course.
- (d) One year course for women, leading to the Diploma in Dental Nursing.
- (e) A proposed two-year course for women leading to a Dental Hygienist's Diploma.
- (f) Continuation courses for graduates of varying length and form, to provide the general practitioner with an opportunity to keep abreast of standard methods and procedures, and also to provide a planned continuation study of newer knowledge.
- (g) Miscellaneous Services:
 - (i) Extramural lectures to local dental societies by members of the staff.
 - (ii) Graduate consultation service.
 - (iii) Library loan service.
2. The Faculty clinic also provides a complete dental treatment service for four to five thousand people a year, many of whom are young children.
3. Research - Eighteen projects in dental research are being carried out under various departments of the Faculty of Dentistry, University of Toronto.

Information regarding the numbers graduating from the Faculty of Dentistry and those remaining in Ontario are shown in Table D9, by years of graduation. This information is shown graphically in Chart D2.

Following World War I, large classes registered in Dentistry, the first class graduating in 1923. By 1927 the graduating class had returned to a prewar level of 60. During depression years, registration in Dentistry reached a low when the class entering in 1929 graduated in 1934, numbering 35. Out of the classes graduating in 1932, 1933 and 1934, Ontario had only 19, 18 and 22, respectively, remaining to practice in the province.

World War II brought accelerated courses, resulting in two graduating classes, totalling 103, in 1943. Again in 1948, out of class of 24 ad eundem students, only five remained in Ontario. These conditions have seriously interrupted the output of dental manpower in the province.

When the output of dentists is considered beside the graph of the increasing population of Ontario, it is evident that many more dentists must be trained each year to meet existing needs for dental care. Loss of Ontario-trained dental personnel to other provinces and to other countries further aggravates an already serious situation.

TABLE D9
FACULTY OF DENTISTRY, UNIVERSITY OF TORONTO
TABULATION SHOWING ORIGIN AND PRESENT LOCATION OF GRADUATES BY CLASSES

Year	Total Number in Class	Origin of Graduates						Present Location of Graduates						Not in Un-known Prac-tice
		Ont.	Per-cent	Sask.	Man.	B. C.	Akta.	Mari-times & Que.	Out-side Can.	U.S.A.	Infld.	Dec-ased Can.	Un-known	
1923	373	257	68.90	33	30	14	11	25	-	3	178	47.72	1	123
1924	266	197	74.06	17	29	5	6	9	1	2	146	54.89	-	80
1925	148	106	71.62	7	14	6	7	4	3	1	74	50.00	-	47
1926	83	58	70.00	5	10	3	2	2	1	2	46	55.0	-	4
1927	60	52	87.0	3	3	-	2	-	-	-	42	70.0	-	2
1928	61	47	77.0	1	5	-	2	3	2	1	43	71.0	-	2
1929	55	37	67.0	4	3	2	2	3	1	3	38	69.0	-	2
1930	64	46	72.0	3	10	-	1	-	3	1	45	70.0	-	4
1931	67	49	73.0	3	7	-	-	3	1	4	53	79.0	-	4
1932	37	17	46.0	7	4	1	-	5	3	1	19	51.0	-	2
1933	37	20	54.0	5	4	1	2	1	2	2	18	49.0	-	5
1934	35	23	66.0	4	2	-	-	4	2	2	22	63.0	-	5
1935	43	28	65.0	1	4	-	-	2	1	7	29	67.0	-	8
1936	55	33	60.0	3	3	1	1	-	14	-	33	60.0	-	15
1937	51	36	71.0	3	1	-	-	3	8	1	36	71.0	-	8
1938	34	20	59.0	3	1	-	-	2	6	2	21	62.0	-	6
1939	48	28	58.33	3	1	-	-	3	13	2	27	56.25	-	3
1940	55	30	55.0	1	3	1	1	-	19	1	30	55.0	-	2
1941	45	31	69.0	8	2	1	1	-	1	1	31	69.0	-	2
1942	40	32	80.0	4	2	1	-	-	1	1	31	78.0	-	2
June (1943)	56	35	63.0	7	7	2	-	2	1	2	39	70.0	-	1
Dec. (1943)	47	32	68.0	6	4	2	1	2	-	-	35	74.0	-	-
1944	61	29	48.0	10	11	7	1	2	1	1	34	56.0	-	2
1945	56	28	48.0	11	11	2	4	1	1	3	34	56.0	-	1
1946	58	38	66.0	6	5	5	1	-	3	1	39	67.0	-	1
1947	75	35	47.0	3	5	4	1	2	1	29	43	56.0	-	1
1948	24	1	4.0	-	-	-	-	-	23	-	52	1.0	-	-
Total	2,036	1,345	65.57	161	176	58	46	63	37	150	1,188	58.35	44	252

N. B. - The significant numbers of non-Canadian graduates in 1947 and 1948 and their proportion to graduates from Ontario are explained by the presence of ad eundem students from Australia who were permitted to qualify for the D.D.S. degree by taking only the final year of the course at the University of Toronto. The Faculty of Dentistry reports that these students were given such special permission only after all students of Canadian origin had been accommodated. As this table shows, the dental course has seldom operated at capacity in the period between the two world wars.

CHAPTER VI

DENTAL PUBLIC HEALTH PROGRAM

A subcommittee, consisting of the Dental Public Health Committee of the Ontario Dental Association, the executive of the Board of the Royal College of Dental Surgeons, and the Public Relations Committee of the Board, prepared and submitted "A Dental Public Health Plan for Ontario". This plan makes three classifications of areas in Ontario where certain dental conditions exist, and suggests plans to meet the needs of each classification. Stress is laid upon education of the public in matters relating to the promotion of positive health through a preventive program. It is pointed out that this must be an organized effort, directed, at the beginning, to all preschool and school children. The maintenance of their dental health through a co-operative effort on the part of an enlightened public, and the provision of preventive dental care by practicing dentists is suggested as essential.

Research in basic sciences is shown to be vital in order to find better controls of dental disease. The epidemiology of dental disease has not been understood. Under a federal research grant a biometric study is now being made at the Faculty of Dentistry, University of Toronto, to learn more of the distribution of dental disease according to tooth surfaces and age groups. If a simple efficient method of assaying the level of dental disease can be found, which may be applied to age groups in the population, it is believed that such information would be invaluable in the administration and evaluation of future dental health programs.

Programs in dental public health education should be directed by dentists specially trained in public health procedures.

Basic dental knowledge should be provided in the training of all teachers and health workers.

Adequate preventive dental care should be made available, especially to children and youths. Extension of teaching facilities should provide for better training of more dentists and ancillary dental personnel, to meet increasing demands for preventive dental care by a steadily increasing population.

Personnel required to carry forward this program is dependent upon facilities for training and some means of stimulating recruitment.

Since a large percentage of the training in dental public health is given at the School of Hygiene, and present facilities preclude training more than four to six in any one year, it would appear that the facilities in the School of Hygiene should be extended to meet an increasing need for more public health personnel.

Some inducement to those best qualified to enter this field is needed. It is suggested that provision for obtaining practice experience without having to buy expensive equipment would interest young men in choosing this specialized professional work.

This type of program fits in with the health unit organization where provision is made for the employment of public health dentists. Experience in demonstration projects shows that one dental health officer, with a dental nurse and part-time clerical assistance, can operate a dental health unit program with a school population of 7,000 - 8,000 children. Beyond that, the use of dental hygienists as the dentist's assistant could be expected to increase the possible school population coverage to 10,000 - 12,000 children in the health unit programs, and slightly reduce the per capita cost. In large health unit areas, costs could be reduced by the employment of dental hygienists, if they became available, under the supervision of a dentist trained in public health.

It is urged that in the next five years a minimum of eight dentists be recruited in Ontario each year for public health training. This would provide sufficient leadership for present health unit programs and those anticipated within this period. Dental hygienist training should be inaugurated in order to meet the need of ancillary personnel in large units and municipal departments of health. It is estimated that a minimum of 10 hygienists each year could be employed to advantage in organized dental health programs within the province.

REPORT OF THE ONTARIO HEALTH SURVEY COMMITTEE

VOLUME II

Medical Manpower in Ontario

Provision of Nursing Care

Control of Tuberculosis

Cancer Control

**THE SECOND VOLUME OF A THREE-VOLUME REPORT
TO THE MINISTER OF HEALTH FOR ONTARIO**

1 9 5 1

REPORT OF THE ONTARIO HEALTH SURVEY COMMITTEE

1951

VOLUME II

CONTENTS OF VOLUME II

Letter of Presentation	Page 203
Index of Tables	Page 205
Index to Charts and Maps	Page 208
Section E: Medical Manpower in Ontario	Page 209
Section F: Provision of Nursing Care	Page 263
Section G: Prevention, Treatment and Control of Tuberculosis	Page 301
Section H: Control of Cancer	Page 335

VOLUME I CONTAINS

Hospital Facilities and Services
Mental Facilities and Services
Private Nursing Homes
Dental Facilities and Services

VOLUME III CONTAINS

Prepayment Plans for Hospital and
Medical Care
Public Health Services
Handicapping Conditions in Children
Rehabilitation of Adults

The Honourable Mackinnon Phillips, M. D.,
Minister of Health for Ontario.

Dear Sir:

I have the honour to present the second volume of the report of the Ontario Health Survey Committee. The first volume, you will recall, was presented in January of this year, and the third and final volume will be forthcoming shortly.

The Ontario Health Survey Committee was appointed by an Order-in-Council approved by His Honour the Lieutenant-Governor the ninth day of September, 1948.

The Order-in-Council contains a provision that:—

"The Committee enquire into and report to the Minister of Health upon—

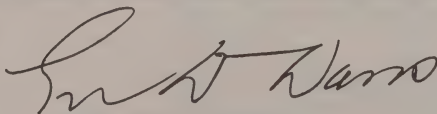
- (i) existing health, hospital and related facilities and services;
- (ii) such other matters as are pertinent to the subject; and
- (iii) a plan for the improvement, extension and establishment of such health, hospital and related services as will ensure the most effective development of health services."

In order to conduct a survey of the scope defined by these terms of reference, and after completion in November, 1948, of a pilot study in one region of the province, the Survey Committee recommended establishment of ten special committees, which were authorized by a second Order-in-Council dated the twenty-first day of April, 1949. Each special committee was formed with a view to assisting in a specific part of the health survey, and therefore its membership included men and women with specialized knowledge and experience, and with particular interest in the subjects under consideration. The special committee members, who contributed generously of their time and energy that this survey might be as well informed as possible, are listed on pages 7 to 10, together with the organizations by whom they were nominated.

This volume of the report, like the one which preceded it and the one which will follow, contains the results of research into four phases of the health question. Volume I dealt with Hospital Facilities and Services, Mental Facilities and Services, Private Nursing Homes, and Dental Facilities and Services. This volume covers Medical Manpower in Ontario; Provision of Nursing Care; Prevention, Treatment and Control of Tuberculosis; and Control of Cancer. The third volume will contain survey material on Public Health Services, Prepayment Plans for Hospital and Medical Care, Handicapping Conditions in Children, and Rehabilitation of Adults.

It is a pleasure to acknowledge the assistance of all committee members, consultants, and members of the Survey staff, and the cooperation of the various departments of the Government of Ontario. The assistance of officials of the Department of Health is deserving of particular mention.

Respectfully submitted,



GEORGE D. DAVIS

Chairman,

Ontario Health Survey Committee.

March 30, 1951.

INDEX TO TABLES IN VOLUME II

Table Number		Page	Table Number		Page
E1	Population-Physician Ratios by Province, 1911-1948.....	216		Physicians by Age Group and Size of Locality.....	232
E2	Physicians in Ontario, 1911-1948...	216	E19	Distribution of Doctors in Specialist Practice.....	234
E3	Medical Manpower--Province of Ontario Compared with Various Countries.....	216	E20	Specialists in Private or Hospital Practice, Dec. 31, 1948.....	236
E4	Distribution of All Active Physicians by Age, 1921-1948.....	217	E21	Specialists in Private or Hospital Practice by Type of Work and Source of Income.....	238
E5	Distribution of Physicians in Ontario by Field of Work, Sex, and Age, Dec. 31, 1948.....	217	E22	Certified Specialists by Type of Work and Certified Specialty.....	240
E6	Physicians in Active Civilian Practice, Internes and Postgraduate Students by Age and Sex, Dec. 31, 1948.....	218	E23	Active Physicians Certified in a Specialty by Age.....	242
E7	Postgraduate Group of Physicians by Age, Sex and Category, Dec. 31, 1948.	218	E24	Active Physicians Certified in a Specialty by Residence and Age.....	243
E8	Distribution of Physicians in Active Civilian Practice by Age and Sex, Dec. 31, 1948.....	219	E25	Physicians with Special Training by Type of Work.....	245
E9	Physicians in Active Civilian Practice by Age and Type of Work, Dec. 31, 1948.....	219	E26	Physicians Reporting Special Training by Type of Training and Residence.....	246
E10	Physicians in Ontario, Dec. 31, 1948, Percentage Distribution and Population-Physician Ratios.....	221	E27	Physicians Who Have Specialist Certificate or Special Training by Specialty.....	247
E11	Physicians in Active Practice by Type of Work, Percentage Distribution, and Population-Physician Ratios.....	222	E28	Deaths Among Male Physicians in Ontario by Age Group.....	250
E12	Physicians in Active Civilian Practice by Type of Work and Age, Dec. 31, 1948.....	223	E29	Physicians Not in Practice by Age Group and Sex.....	251
E13	Percentage Distribution of Certain Groups of Physicians by Age and Region.....	223	E30	Reason for Retirement of Physicians Not in Practice Under Age 64.....	251
E14	Physicians in Active Practice by Major Source of Income, Dec. 31, 1948	224	E31	Graduates of Ontario Medical Schools, 1920-1952.....	253
E15	Physicians in Active Civilian Practice by Residence.....	226	E32	Percentage Distribution of Ontario's Medical School Output, 1935-48....	254
E16	General Practitioners by Residence, Area, and Urbanization.....	228	E33	Percentage Distribution of Output of Each Ontario Medical School, 1935-48.....	254
E17	Percentage Distribution of Population and Physicians by County or District and by Region.....	230	E34	Origin of Medical Students in Ontario Universities During Academic Year 1948-49.....	255
E18	Distribution of Selected Groups of		E35	Percentage Distribution of Medical Students by Year of Training and Source, 1948-49.....	255

INDEX TO TABLES IN VOLUME II (Continued)

Table Number	Page	Table Number	Page
E36	Physicians in Active Civilian Practice Based on Current Population-Physician Ratios, 1951 and 1961... 258	F14	Inventory of Institutional Nursing Personnel in Ontario, Dec. 31, 1948 291
E37	Summary of Estimates of Supply of Physicians with Comparative Census and Survey Figures..... 261	F15	Graduate and Student Nurses in Public General Hospitals in Ontario (including Red Cross Outposts and Canadian Mothercraft Centre)..... 292
F1	Nurses, Registered with Division of Nurses Registration, Ontario Department of Health, 1949, by Place of Residence, Employment, and Sex.. 269	F16	Nurses in Private Practice as Reported by Community Nursing Registries, Dec. 31, 1948..... 294
F2	Number of Registered Nurses Resident in Each County of Ontario by Sex and Type of Employment..... 270	F17	Demand for Professional Private Duty Nursing Service as Reported by Community Registries for 1948..... 295
F3	Number of Nurses Resident in Ontario Employed Full Time in Selected Fields of Nursing by County..... 272	F18	Demand for Nonprofessional Private Duty Nursing Service as Reported by Community Registries for 1948..... 295
F4	Registered Nurses in Ontario Employed Full Time in Fields Other Than Nursing, Dec. 31, 1949, (By Field of Activity and Marital Status) 274	F19	Type and Number of Cases Served by Private Duty Nurses in 1945-1948 as Reported by Community Registries 296
F5	Registered Nurses in Ontario Employed Part Time in Fields Other Than Nursing, Dec. 31, 1949..... 274	F20	Length of Private Duty Cases Reported by Nursing Registries in 23 Ontario Communities for 1948... 297
F6	Number of Registered Nurses Resident in Ontario Reported Employed Full Time in Selected Fields of Nursing, by Age, 1949..... 275	F21	Summary of Inventory of Professional Public Health Nursing Personnel, Dec. 31, 1948..... 299
F7	Number of Registered Nurses Resident in Ontario Reported Employed Full Time in Nursing Field, by Age and Marital Status..... 276	G1	Mass Surveys Conducted Jointly by the Division of Tuberculosis Prevention, Ontario Department of Health, and the Tuberculosis Association, 1942 to 1948 inclusive 312
F8	Summary of Enrollment in Ontario Schools of Nursing, Dec. 31, 1948. 278	G2	Summary of Chest X-ray Films Taken, 1942-1948..... 313
F9	Concentration of Nursing Students by Hospital Size, 1948..... 278	G3	Community X-ray Surveys--Provincial Department of Health, 1945 to 1949; Gage Institute, 1947 to 1949; Indian Health Services, 1948 to 1949..... 313
F10	Student Enrollment by Schools of Nursing, Dec. 31, 1948..... 280	G4	Method of Financing Chest Clinics, Province of Ontario, April 1, 1950. 314
F11	Summary of University Schools of Nursing in Ontario..... 285	G5	Number of Active Cases of Pulmonary Tuberculosis Discovered by Permanent Periodic Clinics in 1948..... 314
F12	Estimated Number of Females Surviving to the Age of 18 years in Ontario from 1948 to 1966..... 288	G6	Incidence of Active Tuberculosis in Industrial Surveys, 1942 to 1949 316
F13	Enrollment and Wastage of Classes in Ontario Schools of Nursing..... 289	G7	Hospital Admission Chest X-ray Program, October, 1949..... 318

INDEX TO TABLES IN VOLUME II (Continued)

Table Number		Page	Table Number		Page
G8	Hospital Admission Chest X-ray Program - Ontario Report of Findings for Six-month Period, October, 1949.....	318	G15	Average Daily Occupancy of Bed Complement of Sanatoria in Ontario During the Year 1948.....	329
G9	Tuberculosis in Immigrants.....	319	G16	Occupancy and Waiting Lists of Ontario Sanatoria, 1947 and 1948...	329
G10	Waiting Lists of Ontario Sanatoria in 1949.....	320	G17	Ontario Sanatoria Personnel, Dec. 31, 1948.....	330
G11	Residence of All Patients in Ontario Sanatoria, Dec. 31, 1948.....	324	G18	Condensed Balance Sheets of Sanatoria for the Year Ended Dec. 31, 1948...	331
G12	Death Rate in Ontario per 100,000 Population from All Types of Tuberculosis with Sanatorium Beds per Death - 1939 to 1948.....	327	G19	Condensed Statement of Ordinary Current Surplus of Sanatoria for the Year Ended Dec. 31, 1948.....	332
G13	Bed Complement of Sanatoria in Ontario (Adults and Children) at End of Hospital Years - 1939 to 1948...	327	H1	Cancer Mortality in Ontario, 1928-1948.....	340
G14	Classification of Bed Complement in Ontario Sanatoria, Dec. 31, 1948...	328	H2	Hospitalized Cancer Cases by Site, Region No. 2 - 1947.....	342
			H3	Distribution of Cancer Cases by Diagnosis, Sex and Age, Region No. 2 - 1947	343

INDEX TO CHARTS AND MAPS IN VOLUME II

Chart Number		Page	Map Number		Page
G1	Trend in Tuberculosis Mortality, Ontario, 1900-1948.....	307	G1	Diagnostic Chest Clinics in Ontario, October, 1949.....	315
G2	Number of Sanatorium Beds in Ontario and Number of Patients Treated in Sanatoria in Ontario, 1930 and 1948.....	322	G2	Hospital Admission Chest X-ray Program, Ontario, October, 1949.	317
			G3	Sanatoria in Ontario, October, 1949	321
Map Number		Page	G4	Residence of Patients in Sanatoria, Dec. 31, 1948.....	323
A1	Division of Ontario into Seven Hospital Regions.....	212	G5	Pneumothorax Treatment Centres in Ontario, December, 1949.....	334

In its analysis of hospital and other health facilities and services in Ontario, and in its projection of future needs, the Survey Committee found the plan of dividing the province into seven hospital regions (see Map A1, page 212) a great aid to efficiency and accuracy.

The basic plan was developed as a result of extensive studies of all conditions having any bearing on hospitalization. Geography and transportation facilities were considered, the character and distribution of population, trading areas and other predetermined divisions, educational facilities available for the training of medical and other personnel, etc. -- all these were weighed in the balance with the existing patterns of hospitalization as revealed by studying the flow of patients to major hospitals in the province.

The resulting regional division has already received commendation from persons dealing with health matters on a provincewide basis, and the Survey Committee has used these divisions throughout its three-volume report.

**REPORT OF THE ONTARIO
HEALTH SURVEY COMMITTEE**

SECTION E

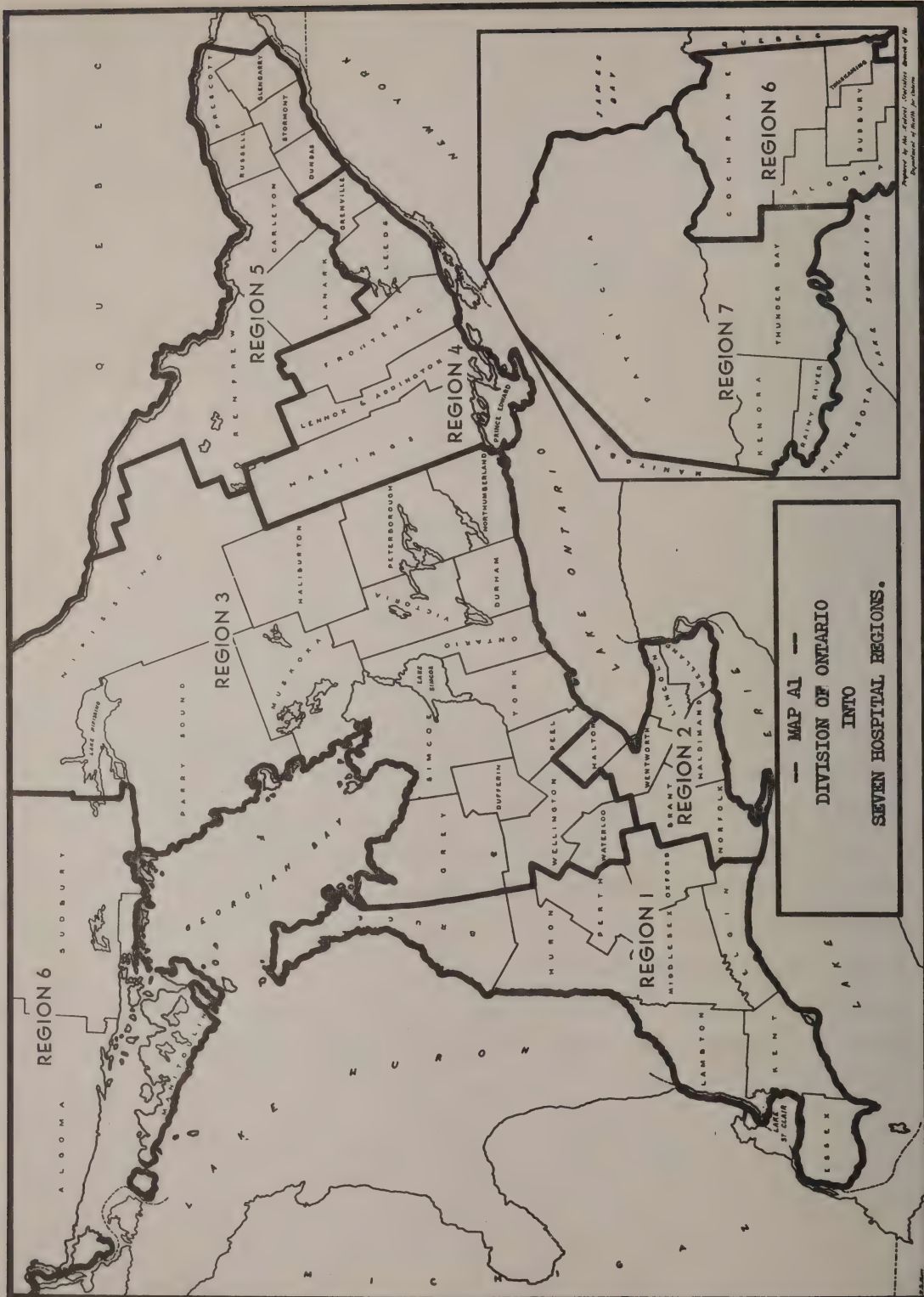
MEDICAL MANPOWER

(Pages 209 to 262)

E. MEDICAL MANPOWER IN ONTARIO

CONTENTS

	Page
Summary	213
Recommendations	215
Chapter I: Trends in Medical Manpower Supply	216
Chapter II: Supply and Distribution of Physicians by Employment	221
Chapter III: The Geographic Distribution of Physicians	225
Chapter IV: Specialization	233
Chapter V: Medical Manpower Needs	249
Chapter VI: Medical Manpower Education	252
Chapter VII: Estimates of Future Needs and Supply of Physicians	258



Prepared by Mr. Robert J. Davidson, Director, Bureau of the
Department of Health, for Ontario

MEDICAL MANPOWER IN ONTARIO

SUMMARY

At the base date of this survey, December 31, 1948, there were 5,672 physicians in Ontario—5,344 men and 328 women. Of this grand total, 383 were retired, 56 were Medical Officers in the armed forces stationed in Ontario and 638 were engaged in postgraduate activity as internes, residents or fellows, leaving 4,595 in active civilian practice. The College of Physicians and Surgeons of Ontario reported that 5,360 physicians were licensed to practice in Ontario on the same date. This figure includes some doctors qualified and licensed to practice but who were engaged in administrative work, teaching, and other non-clinical pursuits, and some who are now in practice outside the province but who are maintaining their registration.

Physicians in active civilian practice in Ontario	4,595
(Primarily in general practice 2,323)	
(Primarily in specialist private practice	1,386)
(Specialists on hospital staffs	240)
(In public health, industry, teaching, etc.	646)
Physicians engaged in postgraduate study	638
Physicians in armed forces stationed in Ontario	56
Retired physicians in Ontario	383

Total physicians in Ontario on December 31, 1948 5,672

Excluding retired physicians, but including all others regardless of the type of work in which they were engaged, there were 5,289 physicians or an average of one active physician for every 805 persons in Ontario. This is the most favorable ratio of any province in Canada. In fact it places Ontario second only to the United States in a comparison with 10 other countries.

Of the province's 5,289 physicians in active practice (including those in the armed forces and postgraduate students), more than half (54.6 per cent) were under the age of 45, and a further 20.5 per cent were in the 45 to 54 year age group.

Ontario's supply of physicians in active civilian practice numbered 4,595 or one physician to 926 persons. More than half of these (2,323) were devoting the major part of their time to general practice; the next largest group comprised 1,386 specialists in private practice. There were 240 reported as specialists on hospital staffs and 646

physicians in other fields such as public health, industrial medicine, teaching and research. At the time of the survey, 13.8 per cent of doctors in general practice were 65 years of age or more, but only 7.5 per cent of specialists in private practice had attained that age.

Of all physicians in active civilian practice, 80.7 per cent derived the major part of their income from private practice, 9.6 per cent from federal, provincial, or local government sources and 4.2 per cent from public general hospitals or sanatoria. The remaining 5.5 per cent comprised physicians employed in teaching, research, industrial medicine, etc.

It is noteworthy, too, that 60.2 per cent of physicians in specialist practice were found in cities of 100,000 or more population (40.3 per cent in the county of York); whereas cities of 100,000 population or greater had only 31.8 per cent of all the general practitioners in the province. There were few specialists in rural areas but there were 522 general practitioners (22.4 per cent of the total). Of the 522 physicians in general practice in municipalities of less than 1,000 population and in rural areas, 24.7 per cent were under 35 years of age, while the largest age group among urban general practitioners was 35 to 44 years. This would seem to cast some doubt on the assertion that young medical graduates tend to settle in larger centres to the neglect of rural communities. On the other hand, it is noted that 12.8 per cent of general practitioners in urban areas were 65 years and over compared with 17.0 per cent in rural areas.

There were 1,372 physicians who although not certified in a specialty reported having special training in a particular field. This number includes 699 general practitioners or 30 per cent of all physicians in general practice.

In estimating the medical manpower needs of Ontario, the Survey Committee asked physicians in all parts of the province to express an opinion as to the distribution of general practitioners and specialists in their respective areas. Out of a total of 3,443 physicians answering this query, 232 said that they considered general practitioner service inadequate in their community; and of the 3,171 who expressed an opinion on specialist services, 639 said these were inadequate.

Its study of the situation in Ontario has led the Survey Committee to the conclusion that the need for general practitioners should be stressed more than the need for certain specialties (except-

ing psychiatry, pathology, and public health). The present ratio is one general practitioner for every 1,832 of population on a provincewide average. This figure indicates a need for more general practitioners.

The number of physicians graduated from medical schools at Queen's University, the University of Western Ontario, and the University of Toronto in the years 1935 to 1948 totalled 2,965, or an average of 212 per year. Of these, 17.2 per cent migrated to the United States and a further 17.2 per cent to other provinces of Canada. A study of the origins of undergraduate students in all four Ontario medical schools during the academic year 1948-49 (see Chapter VI) shows that 84.2 per cent of the students were Ontario residents; 14.5 per cent were from other provinces; and only 0.7 per cent (12 out of 1,848) came from the U.S. This suggests that 17.2 per cent of Ontario medical graduates who were found to go to the U.S. are a clear loss to the medical manpower of this province; while the losses to other provinces are nearly balanced by the numbers of students coming from there to study in Ontario.

The annual output of Ontario medical schools has been more than twice the annual number of deaths among physicians; and, with the addition of graduates from the University of Ottawa medical school beginning in 1951, the annual graduation rate will be approximately three times the average number of deaths among physicians.

If the loss of graduates through emigration were to continue, consideration might well be given the expansion of Ontario's four medical schools or the addition of a fifth; but, on the other hand, if this loss should be reduced through the development or extension of medical schools in other provinces there would be a marked change in the net production of physicians for Ontario over the next few years.

Counteracting to some extent the flow of Ontario medical school graduates away from the province, there is some movement in the other direction. A study of 857 new registrations with the College of Physicians and Surgeons of Ontario for the years 1935, 1939, 1945, and 1948, shows that 125, or 14.6 per cent, of those who registered were graduates of other than Ontario medical schools. Of these 125 non-Ontario graduates registered in these four sample years, 78 were still in Ontario at the time of this survey. In other words, for every 100 graduates of Ontario medical schools who remain in Ontario, there were 14.6 who entered the province and stayed here.

In Chapter VII of this section of the report, an attempt has been made to relate the various factors affecting Ontario's future need in medical manpower and to develop some estimates of the probable numbers available to meet this need by 1961. To maintain the province's overall population-physician ratio at the time of this survey (one doctor for every 926 of population), and allowing for the anticipated increase in population, Ontario will need 5,003 physicians in active civilian practice by 1951, and 5,497 by 1961. Estimates have been worked out to yield, by 1961, a total number of physicians in active civilian practice ranging from 5,607 to 6,680 and depending upon numbers graduating, emigrating and immigrating, death and retirement rates, etc. These are offered merely as a starting point for planning and are by no means final.

The Survey data on physicians in Ontario were secured by direct enquiry of all physicians on record on December 31, 1948. The enquiry covered all doctors registered with the College of Physicians and Surgeons of Ontario and any other resident in Ontario who were included in the National Register of Physicians, or who were employed in hospitals, public health departments, or medical schools in Ontario, although they were not so registered.

MEDICAL MANPOWER RECOMMENDATIONS

It is recommended that, -

- 1 - The Government of Ontario increase its assistance to the medical schools by, -
 - (a) annual maintenance grants based on the number of students enrolled who are residents of Ontario (Chapter VI); and
 - (b) additional grants to provide essential facilities (Chapter VI).
- 2 - The Government of Ontario continue to assist financially in the postgraduate education of psychiatrists and public health specialists and establish similar arrangements for postgraduate education of pathologists. (See Chapter V and also the sections on mental health and cancer control).
- 3 - Comprehensive and current medical manpower statistics be maintained as a valuable instrument for peacetime planning and as an essential guide for the mobilization of doctors in the event of war, and that the College of Physicians and Surgeons of Ontario appears to be the logical body to maintain these statistics (Chapter III).
- 4 - Arrangements be established whereby outlying or sparsely populated areas be assured of adequate medical services; and where it is established that there are no medical services available within reasonable distance, that public funds be used to assist in the provision of medical services (Chapter V)
- 5 - Any major extension of health services be preceded by studies to ascertain the number of physicians required in any such extension and by the training of the additional physicians (Chapter VI).
- 6 - In the event of war, physicians be called from civilian life in the most equitable fashion possible and in a manner calculated to preserve an effective distribution of civilian medical services (Chapter III).
- 7 - The Ontario Medical Association and university medical authorities extend their postgraduate and refresher course programs and decentralize them as much as possible (Chapter VI).

CHAPTER I

TRENDS IN MEDICAL MANPOWER SUPPLY

Population-physician ratios for the census years from 1911 to 1941, and for 1948 (December 31), are given in Table E1, for each province and for

Canada as a whole. The figures given in this table include all physicians in active practice, regardless of their type of work, and exclude retired physicians.

TABLE E1
POPULATION-PHYSICIAN RATIOS BY PROVINCE* 1911-1948

PROVINCE	1911	1921	1931	1941	1948
Prince Edward Island	1,302	1,303	1,397	1,173	1,329
Nova Scotia	1,207	1,146	1,152	1,122	1,194
New Brunswick	1,252	1,447	1,518	1,475	1,501
Quebec	1,003	1,065	1,046	995	1,014
Ontario	828	848	872	806	805**
Manitoba	1,066	1,095	1,051	986	1,005
Saskatchewan	1,299	1,446	1,578	1,511	1,377
Alberta	1,014	1,074	1,255	1,187	1,106
British Columbia	943	861	952	892	902
CANADA	970	1,008	1,034	968	963

*Retired physicians excluded.

**Ontario for December 31, other provinces as at September 30.

The figures in this table emphasize the relatively favorable position of Ontario among the provinces. It has the lowest population-physician ratio, 805 persons per physician.

Contrary to popular impression, there has been very little change in the recorded population-physician ratios since 1911.

TABLE E2

PHYSICIANS IN ONTARIO 1911-1948

YEAR	Physicians*	Population	Population per Physician
1911	3,053	2,527,292	828
1921	3,459	2,933,662	848
1931	3,934	3,431,683	872
1941	4,698	3,787,655	806
1948	5,289	4,255,626**	805

*Excludes retired physicians (383 in 1948) but includes armed forces, post-graduate students, and internes.

**Population estimate from Bureau of Statistics and Research, Government of Ontario.

TABLE E3

MEDICAL MANPOWER - PROVINCE OF ONTARIO
COMPARED WITH VARIOUS COUNTRIES*

COUNTRY	Population per Doctor	Population per General Practitioner
United States	710	1,400
Ontario	805	1,831
Great Britain	880	2,400
Denmark	950	2,000
Canada	970	-
New Zealand	970	-
Australia	1,100	1,700
Norway	1,100	1,400
Netherlands	1,100	2,300
France	1,300	1,500
South Africa	2,400	2,800
Egypt	4,200	11,100

* B. M. J., August 26, 1950.

TABLE E4

DISTRIBUTION OF ALL ACTIVE PHYSICIANS BY AGE* 1921-1948

AGE GROUP	1921		1931		1941		1948	
	No.	%	No.	%	No.	%	No.	%
Under 35	1,009	29.2	1,036	26.3	1,336	28.4	1,494	28.2
35 - 44	1,364**	39.4**	1,105	28.1	1,171	24.9	1,394	26.4
45 - 54	-	-	882	22.4	1,012	21.6	1,087	20.5
55 - 64	881***	25.5***	558	14.2	751	16.0	839	15.9
65 & over	205	5.9	353	9.0	428	9.1	475	9.0
TOTAL	3,459	100.0	3,934	100.0	4,698	100.0	5,289	100.0

* Includes physicians in the armed forces and post-graduate students.

** 35-49 years.

*** 50-64 years.

Data obtained by the Survey Committee indicate that there are now 5,672 physicians in Ontario or 5,289 excluding retired physicians. This gives a ratio of 805 persons per doctor-- a figure slightly lower than that for 1941.

Due to improvement in transportation, diagnostic aids, etc., a physician is now able to serve more persons effectively than he could even a few years ago.

Comparative Statistics on Medical Manpower

Service Supplied by Physicians

The fact that a population-physician ratio is now the same or different from what it was years ago means nothing in itself. Transportation facilities are now much improved and a physician can accomplish much more in any area now than formerly. On the other hand, utilization of, and demand for, medical care are now greater.

Ontario occupies a relatively favorable position in medical manpower supply. Figures provided by the World Health Organization in 1948 show that Ontario ranks second only to the United States in the supply of physicians (Table E3).

The medical manpower supply in Ontario compares very favorably with that in the countries listed, having a lower population-physician ratio

TABLE E5

DISTRIBUTION OF PHYSICIANS IN ONTARIO BY FIELD OF WORK, SEX, AND AGE AS AT DECEMBER 31, 1948

AGE GROUP	FIELD OR WORK				TOTAL		
	Active Civilian Practice	Post-* Graduate Study	Armed Forces	Retired	Male	Female	Total
Under 30	315	494	10	10	759	70	829
30 - 34	547	112	16	15	643	47	690
35 - 39	627	22	12	8	627	42	669
40 - 44	713	7	13	14	695	52	747
45 - 49	545	2	3	13	537	26	563
50 - 54	534	1	2	21	527	31	558
55 - 59	434	-	-	19	438	15	453
60 - 64	405	-	-	41	430	16	446
65 - 69	223	-	-	48	260	11	271
70 - 74	158	-	-	50	202	6	208
75 & over	94	-	-	89	176	7	183
N. S.	-	-	-	55	50	5	55
TOTAL	4,595	638	56	383	5,344	328	5,672

*Includes internes, residents and fellows.

TABLE E6

**PHYSICIANS IN ACTIVE CIVILIAN PRACTICE, INTERNES AND POSTGRADUATE STUDENTS*
BY AGE AND SEX, DECEMBER 31, 1948**

AGE GROUP	Male		Female		TOTAL	
	Number	Per Cent	Number	Per Cent	Number	Per Cent
Under 30	744	14.9	65	25.9	809	15.5
30 - 34	628	12.6	31	12.3	659	12.6
35 - 39	613	12.3	36	14.3	649	12.4
40 - 44	676	13.6	44	17.5	720	13.8
45 - 49	528	10.6	19	7.6	547	10.4
50 - 54	511	10.3	24	9.6	535	10.2
55 - 59	424	8.5	10	4.0	434	8.3
60 - 64	394	7.9	11	4.4	405	7.7
65 - 69	221	4.4	2	0.8	223	4.3
70 - 74	152	3.1	6	2.4	158	3.0
75 & over	91	1.8	3	1.2	94	1.8
TOTAL	4,982	100.0	251	100.0	5,233	100.0

* Physicians in the armed forces and retired physicians are excluded.

than either the United Kingdom or New Zealand, and a substantially lower figure than that for Australia. On the contrary, it has a higher ratio than that for the United States, which had 710 persons per physician (Table E3).

These data are reassuring evidence of a healthy medical manpower position. It is true, however, that like the other professions and like all skilled trades, special short-notice demands, such as are created by wars, cannot be met readily. The young candidates for medical schools continue to outnumber the vacancies but at the same time the proportion of men and women in the age group from which these candidates are drawn is shrinking in relation to the total population. This last fact is worthy of special note for it will exert an important influence on the volume of applicants for entry to medical schools.

Ages of Physicians in Ontario

The age of physicians has a direct bear-

ing on the effectiveness of physicians in practice, and also upon retirement and death. The age factor is, therefore, important in considering the distribution of physicians.

Census Data

The census data on all active physicians in Ontario (excluding retired physicians but including doctors in the armed forces and postgraduate students) are presented in Table E4.

There has been little major change in the age distribution of doctors in the last 17 years, but there is a noticeable increase in the proportion at ages 65 and over compared with 1921.

Physicians in Ontario - December 31, 1948, by Age

A total of 5,672 physicians in Ontario were included in the survey. This included 328 female physicians (Table E5).

Noteworthy in this table is the large group at ages 40 - 44 years. These are the grad-

TABLE E7

**THE POSTGRADUATE GROUP OF PHYSICIANS BY AGE, SEX AND CATEGORY AS AT
DECEMBER 31, 1948**

AGE GROUP	Interne			Resident			Fellow			Others*	TOTAL		
	M	F	T	M	F	T	M	F	T	M	M	F	T
Under 29	323	24	347	55	6	61	57	10	67	19	454	40	494
30 - 34	42	3	45	41	-	41	22	-	22	4	109	3	112
35 - 39	10	-	10	7	-	7	3	-	3	2	22	-	22
40 - 44	3	-	3	1	-	1	1	-	1	2	7	-	7
45 - 49	1	-	1	-	-	-	-	1	1	-	1	1	2
50 - 54	-	-	-	-	1	1	-	-	-	-	-	1	1
TOTAL	379	27	406	104	7	111	83	11	94	27	593	45	638

*Includes unspecified.

TABLE E8

DISTRIBUTION OF PHYSICIANS IN ACTIVE CIVILIAN PRACTICE* BY AGE AND SEX
AT DECEMBER 31, 1948

AGE GROUP	Male		Female		TOTAL	
	Number	Per Cent	Number	Per Cent	Number	Per Cent
Under 30	293	6.7	22	10.7	315	6.9
30 - 34	516	11.7	31	15.0	547	11.9
35 - 39	591	13.5	36	17.5	627	13.7
40 - 44	669	15.2	44	21.4	713	15.5
45 - 49	527	12.0	18	8.7	545	11.9
50 - 54	511	11.6	23	11.2	534	11.6
55 - 59	424	9.7	10	4.8	434	9.4
60 - 64	394	9.0	11	5.3	405	8.8
65 - 69	221	5.0	2	1.0	223	4.9
70 - 74	152	3.5	6	2.9	158	3.4
75 & over	91	2.1	3	1.5	94	2.0
TOTAL	4,389	100.0	206	100.0	4,595	100.0

* Excludes retired physicians, medical officers in the armed forces, internes, residents, and fellows.

uates of the depression years, suggesting a reduced migration of graduates. This is supported by available medical school data.

Excluding retired physicians (383), and physicians in the armed forces (56), there were 5,233 doctors in Ontario included in the survey.

Nine per cent of all physicians in active civilian practice, internes, and postgraduate students were in the age group 65 years and over.

Armed Forces

Of the 56 physicians in the armed forces located in Ontario on the date of the survey, 26 were

under 35 years of age, 25 were 35-44 years and five were 45-54 years.

Internes, Residents, Fellows

A tabulation of the age and sex distribution of the junior and senior internes, residents, and fellows, is given in Table E7.

Physicians in Active Civilian Practice by Age

Excluding retired physicians, internes, residents, fellows and doctors in the armed forces in Ontario, there were 4,595 physicians in active civilian practice in some form. Of this number, 206 were women (Table E8). The detailed tables

TABLE E9

PHYSICIANS IN ACTIVE CIVILIAN PRACTICE BY AGE AND TYPE OF WORK* AS AT
DECEMBER 31, 1948

AGE GROUP	General Practice		Specialist Priv. Practice		Specialist Hosp. Staff		Other**		TOTAL	
	No.	%	No.	%	No.	%	No.	%	No.	%
Under 30	226	9.7	34	2.5	11	4.6	44	6.8	315	6.9
30 - 34	299	12.9	161	11.6	27	11.2	60	9.3	547	11.9
35 - 39	288	12.4	215	15.5	40	16.7	84	13.0	627	13.7
40 - 44	315	13.6	246	17.7	53	22.1	99	15.3	713	15.5
45 - 49	215	9.2	221	16.0	36	15.0	73	11.4	545	11.9
50 - 54	255	11.0	158	11.4	22	9.2	99	15.3	534	11.6
55 - 59	206	8.9	133	9.6	18	7.5	77	11.9	434	9.4
60 - 64	199	8.6	114	8.2	26	10.8	66	10.2	405	8.8
65 - 69	132	5.7	60	4.3	1	0.4	30	4.7	223	4.9
70 - 74	110	4.7	34	2.5	6	2.5	8	1.2	158	3.4
75 & over	78	3.3	10	0.7	-	-	6	0.9	94	2.0
TOTAL	2,323	100.0	1,386	100.0	240	100.0	646	100.0	4,595	100.0

* Excludes retired physicians, medical officers in the armed forces, internes, residents, and fellows.

** Includes public health, industrial medicine, medical teaching, research, etc.

presented throughout the remainder of this section are limited to this group of doctors in active civilian practice.

Of the 4,595 active physicians, 475 or 10.3 per cent were 65 years of age or over. The

age distribution of these physicians in four main practice groups is set out in Table E9.

At the time of the survey, 13.7 per cent of doctors in general practice were 65 years of age or over, but only 7.5 per cent of physicians in specialist practice were 65 years of age or over.

CHAPTER II

SUPPLY AND DISTRIBUTION OF PHYSICIANS BY EMPLOYMENT

The distribution of the 5,672 physicians covered by the survey, by practice group, is set out in Table E10. Population-physician ratios to the appropriate number of significant figures, are included. This and similar tables reflect major fields of work, defined as the types of work to which physicians devoted 50 per cent or more of their time.

Of the 5,672 physicians in Ontario on December 31, 1948, 4,595 or 81.0 per cent were in active civilian practice. Of these 3,709 (65.4 per cent of the total) were devoting the major part of their time either to general or specialist private practice. There were 638 internes, residents, or fellows and 56 in the armed forces. A total of 383 of 6.8 per cent of the total were reported as retired.

Of the active practice group of 4,595 doctors (926 persons per doctor), 2,323 were in general practice. This is a population-physician ratio of 1,832.

Physicians devoting 50 per cent or more of their time to specialist private practice totalled 1,386 - a population-physician ration of 3,070; hospital practice accounted for 359 and public health for 145. A more detailed distribution of the active practice group is given in Table E11.

Of all physicians in active practice 50.6 per cent were devoting part of their time to general practice and 30.2 per cent to specialist private practice. A further 5.2 per cent of those physicians were in specialist hospital practice

TABLE E10
PHYSICIANS IN ONTARIO - DEC. 31, 1948

PERCENTAGE DISTRIBUTION AND POPULATION-PHYSICIAN RATIOS*

MAJOR TYPE OF WORK	Number	Per Cent	Population per Physician
General practice	2,323	41.0	1,832
Specialist private practice	1,386	24.4	3,070
Hospital	359	6.3	11,900
Public Health	145	2.6	29,300
Industrial medicine	63	1.1	67,000
Medical research	60	1.0	71,000
Medical teaching	58	1.0	73,000
Insurance	23	0.4	185,000
Workmen's Compensation Board	22	0.4	193,000
Other government service n. s. e.	77	1.4	55,000
Medical administration n. s. e.	62	1.1	69,000
Other and unspecified	17	0.3	250,000
TOTAL	4,595	81.0	926
Internes, residents, fellows	638	11.2	6,670
Armed forces	56	1.0	76,000
TOTAL	5,289	93.2	805
Retired	383	6.8	11,100
GRAND TOTAL	5,672	100.0	750

*Estimated population - 4,255,626 (Bureau of Statistics and Research, Ontario).

TABLE E11

PHYSICIANS IN ACTIVE PRACTICE BY TYPE OF WORK

PERCENTAGE DISTRIBUTION AND POPULATION-PHYSICIAN RATIOS

MAJOR TYPE OF WORK	Number	Per Cent	Ratio*
General practice	2,323	50.56	1,832
Specialists (private practice)	1,386	30.16	3,070
Hospital specialist staff	240	5.22	17,700
Hospital administration	60	1.31	71,000
Hospital general staff	59	1.29	72,000
Public health (M. O. H., director health unit)	57	1.24	75,000
Public health (laboratory)	14	0.30	300,000
Public health (community health services)	16	0.35	270,000
Public health (school health services)	12	0.26	350,000
Public health administration n. s. e.	46	1.00	92,000
Industrial medicine, general	59	1.28	72,000
Industrial medicine, examinations and consultation	4	0.09	-
Research, general	52	1.13	82,000
Research, director or administrator	8	0.17	530,000
Teaching, medical school	57	1.24	75,000
Teaching, other than medical school	1	0.02	-
Insurance, examinations, medical consultant	12	0.26	350,000
Insurance, administration	11	0.24	390,000
W. C. B., administration	5	0.11	850,000
W. C. B., other	17	0.37	250,000
Government service, examinations	22	0.48	193,000
Government service, general medicine	23	0.50	185,000
Government service, consultant	32	0.70	130,000
Medical administration n. s. e.	62	1.35	69,000
Other and unspecified	17	0.37	-
TOTAL	4,595	100.00	926

*Ratio not computed for fewer than five doctors.

Physicians in Active Civilian Practice by Type Work and Age

The ages of all physicians in active civilian practice (4,595) are set out in Table E12.

Physicians in Active Civilian Practice by Region[▲] and Age

The percentage distributions of physicians in active civilian practice, in general practice, and in specialist practice, by age and by region are given in Table E13. There are marked differences

[▲]See page 212 for regional division of the province.

in the age distribution of physicians in general and specialist practice in various parts of the province. For example, 16.6 per cent of the general practitioners in Region 5 (eastern counties) are 65 years of age or over compared with 6.2 per cent in Region 6 (northern districts).

Source of Income

Besides being classified by type of practice, each physician was also assigned to a category to reflect source of income.

A summary of the distribution of the 4,595 physicians in active civilian practice, by major source of income or "auspices" is presented in Table E14.

TABLE E12

PHYSICIANS IN ACTIVE CIVILIAN PRACTICE BY TYPE OF WORK AND AGE - DEC. 31, 1948

TYPE OF WORK	AGE GROUP						TOTAL
	Under 35	35-44	45-54	55-64	65-74	75 & over	
General practice	525	603	470	405	242	78	2,323
Specialists (private practice)	195	461	379	247	94	10	1,386
Hospital, specialist staff	38	93	58	44	7	-	240
Hospital, other	27	32	30	26	3	1	119
Public health	12	53	38	32	10	-	145
Industrial medicine	11	18	19	10	5	-	63
Research	24	17	12	4	2	1	60
Teaching	10	20	12	12	3	1	58
Insurance	3	4	4	8	3	1	23
Workmen's Compensation Board	5	6	7	4	-	-	22
Government service	3	19	29	22	4	-	77
Medical administration n. s. e.	3	13	19	22	4	1	62
Other and unspecified	6	1	2	3	4	1	17
TOTAL	862	1,340	1,079	839	381	94	4,595
PER CENT	18.8	29.2	23.5	18.2	8.3	2.0	100.0

TABLE E13

PERCENTAGE DISTRIBUTION OF CERTAIN GROUPS OF PHYSICIANS BY AGE AND REGION

AGE GROUP	REGION							TOTAL
	1	2	3	4	5	6	7	
	Physicians in Active Civilian Practice							
Under 35	18.20	20.37	18.15	15.28	15.98	23.45	33.33	18.76
35 - 44	30.80	28.35	28.44	28.82	28.99	34.07	27.27	29.16
45 - 54	24.07	23.94	23.17	23.15	24.65	23.89	18.18	23.48
55 - 64	16.58	19.02	19.10	21.83	19.72	12.39	9.85	18.26
65 - 74	7.86	5.60	9.10	9.61	8.88	4.87	11.37	8.29
75 & over	2.49	2.72	2.04	1.31	1.78	1.33	-	2.05
TOTAL (%)	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
TOTAL (No.)	802	589	2,110	229	507	226	132	4,595

AGE GROUP	Physicians in General Practice							TOTAL
Under 35	21.75	25.64	20.24	21.31	19.91	30.23	39.51	22.60
35 - 44	27.35	24.50	26.25	27.87	22.75	29.46	19.75	25.96
45 - 54	23.32	18.23	19.63	18.03	22.27	21.71	16.05	20.23
55 - 64	13.68	20.51	18.82	18.85	18.48	12.40	11.11	17.43
65 - 74	10.09	6.84	11.60	11.48	13.27	4.65	13.58	10.42
75 & over	3.81	4.28	3.46	2.46	3.32	1.55	-	3.36
TOTAL (%)	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
TOTAL (No.)	446	351	983	122	211	129	81	2,323

AGE GROUP	Physicians in Specialist Practice							TOTAL
Under 35	13.06	12.79	15.17	10.60	13.55	11.67	18.18	14.07
35 - 44	35.14	31.40	33.58	25.76	30.32	40.00	42.43	33.26
45 - 54	26.58	34.88	25.48	25.76	28.39	30.00	24.24	27.35
55 - 64	19.82	16.28	17.23	25.76	20.00	13.33	6.06	17.82
65 - 74	4.50	4.07	7.95	12.12	6.45	3.33	9.09	6.78
75 & over	0.90	0.58	0.59	-	1.29	1.67	-	0.72
TOTAL (%)	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
TOTAL (No.)	221	172	679	66	155	60	33	1,386

TABLE E14

PHYSICIANS IN ACTIVE PRACTICE BY MAJOR SOURCE OF INCOME AS AT DEC. 31, 1948

AUSPICES	Region							TOTAL	
	1	2	3	4	5	6	7	No.	Per Cent
Private practice	669	523	1,663	187	364	189	114	3,709	80.7
Federal government	33	6	53	5	85	1	-	183	4.0
Provincial government	29	13	100	13	6	8	5	174	3.8
Local government	11	11	47	4	5	4	-	82	1.8
Medical school	20	-	65	8	7	-	-	100	2.2
Voluntary organization	-	-	18	-	-	1	-	19	0.4
Public general hospital or sanatorium	25	29	98	8	25	4	6	195	4.2
Insurance	2	1	16	1	5	-	-	25	0.5
Industrial plant	6	5	23	-	2	16	7	59	1.3
Other and not stated	7	1	27	3	8	3	-	49	1.1
TOTAL	802	589	2,110	229	507	226	132	4,595	100.0

Of the 4,595 physicians in active civilian practice, 80.7 per cent derived their major income from private practice, 4.0 per cent from the federal government, 3.8 per cent from the pro-

vincial government, 1.8 per cent from local governments and 4.2 per cent from public general hospital or sanatorium.

CHAPTER III

THE GEOGRAPHIC DISTRIBUTION OF PHYSICIANS

The Validity of Population-Physician Ratios for Small Areas

While the most convenient measure of the adequacy of supply of physicians, and the one most commonly used, is the ratio of the population to physicians, it does not adequately describe local needs or requirements, nor does it give a complete picture of the medical services rendered. Such factors as topography, distance, lines of communication, travel, etc., are important in determining the availability of medical service.

Since the population-physician ratios may give a false impression of need or requirements, the use of them has been restricted in this report to counties and districts, and the province as a whole. Only individual local assessment of a local situation can determine the extent to which a local medical service is adequate or inadequate.

Local Requirements

The requirements of any area for medical services depend not simply on the number of people living there, but on factors such as attitude toward medical care, density of population, topography of the area, transportation facilities, the health of the population, the prevalence of disease, the type of the medical facilities, and the location of special facilities for medical care. All these and others have a bearing on any determination of the degree to which medical services are available. Consideration must also be given to the location and concentration of specialists associated with the location of hospitals and medical schools.

Despite these various considerations, population-physician ratios are helpful in expressing and in assessing the overall supply and distribution of physicians, and it is on these grounds that the ratios for various parts of the province are presented.

In most of the tables, unless otherwise specified, the figures relate to physicians in active civilian practice (4,595). This figure excludes not only retired physicians, but physicians in the armed forces and post-graduate students (including residents, internes, and fellows).

Variation in Physician Distribution by Area

The figures for the province as a whole convey no idea of the distribution of physicians throughout the province, from one region to another, from one county to another, or from one municip-

ality to another. Some concept of the variations is given in Table E15, in which are set out, by county or district and by region, the numbers of physicians in active civilian practice, the population-physician ratios, the county or district areas per physician, and the per cent urbanization based on the 1941 census.

In Table E15 it is noted that there is substantial variation in the observed population-physician ratios from one county or district to another and from region to region. The ratios for Regions 6 and 7, which comprise the districts of northern Ontario, are equally high. Region 3, which includes York County, has the lowest ratio (845), followed by Regions 5, 1, and 4. Within these and other areas the ratios vary widely.

Among the population-physician ratios for counties and districts, those for Middlesex (560), Frontenac (600), Carleton (638), and York (718)--the four university medical centres of the province--are by far the lowest.

Similar data on the distribution of the 2,323 general practitioners are set out in Table E16. The sharp differences in the population-physician ratios in Table E15 are levelled off here, indicating that the general practitioner distribution is relatively much more even than that for all physicians in active civilian practice. Region 6 shows the poorest position, with a population-general practitioner ratio of 2,430. Next in order comes Region 5, comprising the eastern counties of Ontario, and then Region 7.

The actual and percentage distribution of the 4,595 physicians in active civilian practice in Ontario, and also for the large cities and towns, were worked out by the Survey Committee and have been submitted to the Minister of Health. The residence distribution of general practitioners and specialists in private practice has also been developed. These figures show that there are substantial variations in the proportion of doctors devoting the major portion of their time to private practice.

General Comment

These data are not presented with the idea that the differential between one area and another reflects necessarily the differential in the quality and extent of medical care, but simply to indicate that there is such difference. Many of the centres, in fact most of them with a high population-physician ratio, are either medical teaching centres or are highly urbanized.

TABLE E15
PHYSICIANS IN ACTIVE CIVILIAN PRACTICE BY RESIDENCE

COUNTY OR DISTRICT	Estimated† Population 1948	Physicians Dec. 31, 1948		Square Miles per Physician	Per Cent* Urban
		Number	Population per Physician		
Bruce	42,600	32	1,300	52	39.9
Elgin	51,100	47	1,100	15	51.4
Essex	200,700	193	1,000	4	74.5
Huron	43,900	33	1,300	39	32.4
Kent	74,000	66	1,100	14	48.4
Lambton	67,800	65	1,000	17	50.2
Middlesex	147,300	263	560	5	66.6
Oxford	55,100	62	890	12	47.9
Perth	50,500	41	1,200	20	54.6
REGION 1 TOTAL	733,000	802	914	12	58.1
Brant	66,100	67	990	6	64.5
Haldimand	21,800	20	1,100	24	37.4
Halton	35,900	34	1,100	11	50.9
Lincoln	78,800	79	1,000	4	61.8
Norfolk	39,400	23	1,700	28	33.9
Welland	115,600	92	1,300	4	61.8
Wentworth	241,600	274	880	2	83.9
REGION 2 TOTAL	599,200	589	1,020	5	67.5
Dufferin	14,200	10	1,400	56	30.9
Durham	27,100	22	1,200	29	42.3
Grey	59,500	45	1,300	38	44.7
Haliburton	7,900	2	3,900	743	-
Muskoka	23,900	22	1,100	72	38.7
Nipissing	47,600	37	1,300	204	54.6
Northumberland	34,500	33	1,000	22	40.2
Ontario	71,400	70	1,000	12	56.4
Parry Sound	29,600	17	1,700	255	32.5
Peel	42,400	27	1,600	17	30.0
Peterborough	56,700	56	1,000	25	60.3
Simcoe	97,200	89	1,100	19	52.0
Victoria	25,700	31	830	43	44.7
Waterloo	113,700	104	1,100	5	74.9
Wellington	63,000	59	1,100	17	57.8
York	1,067,600	1,486	718	1	77.1
REGION 3 TOTAL	1,782,000	2,110	845	13	66.9

†Derived from population estimates made by the Bureau of Statistics and Research, Ontario.

*1941 census data - all incorporated cities, towns and villages.

TABLE E15 (Cont'd)
PHYSICIANS IN ACTIVE CIVILIAN PRACTICE BY RESIDENCE

COUNTY OR DISTRICT	Estimated† Population 1948	Physicians Dec. 31, 1948		Square Miles per Physician	Per Cent* Urban
		Number	Population per Physician		
Frontenac	60,200	100	600	16	61.9
Grenville	16,800	14	1,200	33	43.1
Leeds	36,400	32	1,100	28	47.6
Lennox & Addington	18,000	14	1,300	84	22.6
Prince Edward	18,100	14	1,300	28	33.3
REGION 4 TOTAL	219,100	229	957	30	48.7
Carleton	226,600	355	638	3	81.4
Dundas	16,400	9	1,800	43	28.7
Glengarry	18,400	10	1,800	48	19.6
Lanark	34,200	29	1,200	39	57.7
Prescott	25,000	16	1,600	31	34.9
Renfrew	57,700	41	1,400	73	45.0
Russell	18,100	8	2,300	51	17.5
Stormont	47,700	39	1,200	11	35.5
REGION 5 TOTAL	444,100	507	876	14	59.5
Algoma	59,200	42	1,400	21	58.6
Cochrane	87,900	65	1,400	804	47.9
Manitoulin	12,200	5	2,400	318	16.5
Sudbury	100,900	76	1,300	238	53.0
Timiskaming	53,500	38	1,400	155	22.4
REGION 6 TOTAL	313,700	226	1,390	430	45.5
Rainy River	21,600	9	2,400	808	37.1
Thunder Bay	107,800	92	1,200	570	68.1
Kenora & Patricia	35,200	31	1,100	4,943	37.8
REGION 7 TOTAL	164,600	132	1,250	1,613	56.4
GRAND TOTAL	4,255,700	4,595	926	79	61.7

†Derived from population estimates made by the Bureau of Statistics and Research, Ontario.

*1941 census data - all incorporated cities, towns and villages.

TABLE E16
GENERAL PRACTITIONERS BY RESIDENCE, AREA, AND URBANIZATION

COUNTY OR DISTRICT	Estimated† Population 1948	Physicians Dec. 31, 1948		Square Miles per Physician	Per Cent* Urban
		Number	Population per Physician		
Bruce	42,600	29	1,500	57	39.9
Elgin	51,100	31	1,600	23	51.4
Essex	200,700	118	1,700	6	74.5
Huron	43,900	29	1,500	45	32.4
Kent	74,000	54	1,400	17	48.4
Lambton	67,800	36	1,900	31	50.2
Middlesex	147,300	73	2,000	17	66.6
Oxford	55,100	44	1,300	17	47.9
Perth	50,500	32	1,600	26	54.6
REGION 1 TOTAL	733,000	446	1,640	21	58.1
Brant	66,000	41	1,600	10	64.5
Haldimand	21,800	19	1,100	25	37.4
Halton	35,900	30	1,200	12	50.9
Lincoln	78,800	43	1,800	8	61.8
Norfolk	39,400	21	1,900	30	33.9
Welland	115,600	57	2,000	7	61.8
Wentworth	241,600	140	1,700	3	83.9
REGION 2 TOTAL	599,200	351	1,710	9	67.5
Dufferin	14,200	7	2,000	80	30.9
Durham	27,100	20	1,400	31	42.3
Grey	59,500	35	1,700	49	44.7
Haliburton	7,900	2	3,900	743	-
Muskoka	23,900	12	2,000	142	38.7
Nipissing	47,600	24	2,000	315	54.6
Northumberland	34,500	28	1,200	26	40.2
Ontario	71,400	46	1,600	19	56.4
Parry Sound	29,600	16	1,900	271	32.5
Peel	42,400	20	2,100	24	30.2
Peterborough	56,700	24	2,400	59	60.3
Simcoe	97,200	69	1,400	24	52.0
Victoria	25,700	25	1,000	54	44.7
Waterloo	113,700	67	1,700	8	74.9
Wellington	63,000	39	1,600	26	27.8
York	1,067,600	549	1,900	2	77.1
REGION 3 TOTAL	1,782,000	983	1,810	37	66.9

†Derived from population estimates made by the Bureau of Statistics and Research, Ontario.

*1941 census data - all incorporated cities, towns and villages.

TABLE E16 (Cont'd)
GENERAL PRACTITIONERS BY RESIDENCE, AREA, AND URBANIZATION

COUNTY OR DISTRICT	Estimated† Population 1948	Physicians Dec. 31, 1948		Square Miles per Physician	Per Cent* Urban
		Number	Population per Physician		
Frontenac	60,200	28	2,100	57	61.9
Grenville	16,800	11	1,500	42	43.1
Hastings	69,600	41	1,700	57	51.3
Leeds	36,400	19	1,900	47	47.6
Lennox & Addington	18,000	12	1,500	98	22.6
Prince Edward	18,100	11	1,600	35	33.3
REGION 4 TOTAL	219,100	122	1,800	56	48.7
Carleton	226,600	89	2,500	11	81.4
Dundas	16,400	9	1,800	43	28.7
Glengarry	18,400	10	1,800	48	19.6
Lanark	34,200	26	1,300	44	57.7
Prescott	25,000	10	2,500	49	34.9
Renfrew	57,700	35	1,600	86	45.0
Russell	18,100	7	2,600	58	17.5
Stormont	47,700	25	1,900	16	35.5
REGION 5 TOTAL	444,100	211	2,100	34	59.5
Algoma	59,200	29	2,200	30	58.6
Cochrane	87,900	42	2,100	1,244	47.9
Manitoulin	12,200	5	2,400	318	16.5
Sudbury	100,900	24	4,200	752	53.0
Timiskaming	53,500	29	1,800	203	22.4
REGION 6 TOTAL	313,700	129	2,430	753	45.5
Rainy River	21,600	9	2,400	808	37.1
Thunder Bay	107,800	45	2,400	1,166	68.1
Kenora & Patricia	35,200	27	1,300	5,675	37.8
REGION 7 TOTAL	164,600	81	2,000	2,629	56.4
GRAND TOTAL	4,255,700	2,323	1,832	156	61.7

†Derived from population estimates made by Bureau of Statistics and Research, Ontario.

*1941 census data - all incorporated cities, towns and villages.

TABLE E17
PERCENTAGE DISTRIBUTION OF POPULATION AND PHYSICIANS
BY COUNTY OR DISTRICT AND BY REGION

RESIDENCE	Population	Active Practice	General Practice	Specialists
Bruce	1.00	0.70	1.25	0.07
Elgin	1.20	1.02	1.34	0.65
Essex	4.72	4.20	5.08	4.18
Huron	1.03	0.72	1.25	0.29
Kent	1.74	1.44	2.32	0.72
Lambton	1.59	1.41	1.55	1.81
Middlesex	3.46	5.72	3.14	7.14
Oxford	1.29	1.35	1.89	0.51
Perth	1.19	0.89	1.38	0.58
REGION 1 TOTAL	17.22	17.45	19.20	15.95
Brant	1.55	1.46	1.76	1.30
Haldimand	0.51	0.44	0.82	0.07
Halton	0.84	0.74	1.29	0.22
Lincoln	1.85	1.72	1.85	1.80
Norfolk	0.93	0.50	0.91	0.15
Welland	2.72	2.00	2.45	2.16
Wentworth	5.68	5.96	6.03	6.71
REGION 2 TOTAL	14.08	12.82	15.11	12.41
Dufferin	0.33	0.22	0.30	0.14
Durham	0.64	0.48	0.86	0.07
Grey	1.40	0.98	1.51	0.72
Haliburton	0.18	0.04	0.09	-
Muskoka	0.56	0.48	0.52	0.22
Nipissing	1.12	0.81	1.03	0.65
Northumberland	0.81	0.72	1.21	0.07
Ontario	1.68	1.52	1.98	0.94
Parry Sound	0.70	0.37	0.69	0.07
Peel	1.00	0.59	0.86	0.07
Peterborough	1.33	1.22	1.03	2.02
Simcoe	2.28	1.94	2.97	0.72
Victoria	0.60	0.67	1.08	0.29
Waterloo	2.67	2.26	2.88	1.88
Wellington	1.48	1.28	1.68	0.79
York	25.09	32.34	23.63	40.34
REGION 3 TOTAL	41.87	45.92	42.32	48.99
Frontenac	1.41	2.18	1.21	2.96
Grenville	0.39	0.30	0.47	0.14
Hastings	1.64	1.20	1.76	0.94
Leeds	0.86	0.70	0.82	0.51
Lennox & Addington	0.42	0.30	0.52	0.07
Prince Edward	0.43	0.30	0.47	0.14
REGION 4 TOTAL	5.15	4.98	5.25	4.76

TABLE E17 (Cont'd)
PERCENTAGE DISTRIBUTION OF POPULATION AND PHYSICIANS
BY COUNTY OR DISTRICT AND BY REGION

RESIDENCE	Population	Active Practice	General Practice	Specialists
Carleton	5.32	7.73	3.83	9.96
Dundas	0.39	0.20	0.39	-
Glengarry	0.43	0.22	0.42	-
Lanark	0.80	0.63	1.12	0.22
Prescott	0.59	0.35	0.43	0.36
Renfrew	1.36	0.89	1.51	0.07
Russell	0.43	0.17	0.30	-
Stormont	1.12	0.85	1.08	0.57
REGION 5 TOTAL	10.44	11.04	9.08	11.18
Algoma	1.39	0.92	1.25	0.65
Cochrane	2.06	1.41	1.81	1.08
Manitoulin	0.29	0.11	0.21	-
Sudbury	2.37	1.65	1.03	2.24
Timiskaming	1.26	0.83	1.25	0.36
REGION 6 TOTAL	7.37	4.92	5.55	4.33
Kenora & Patricia	0.83	0.67	1.16	0.14
Rainy River	0.51	0.20	0.39	-
Thunder Bay	2.53	2.00	1.94	2.24
REGION 7 TOTAL	3.87	2.87	3.49	2.38
ALL REGIONS	100.00	100.00	100.00	100.00
TOTAL NUMBER	4, 256, 000	4, 595	2, 323	1, 386

In assessing the numbers and the distribution of medical personnel, stress should be made not alone on any arbitrary figure of "doctor shortage", but on the positive evidences of medical progress over the last half century. In 1901, the life expectancy at birth of males was 48 years; in 1931 it was 61 years; in 1941 it was 63 years, and for 1947 it was 65 years. Great reductions have taken place in the incidence and mortality from communicable diseases, and great improvement has been effected for maternal and infant mortality. Mortality from tuberculosis is now a quarter of what it was just 25 years ago.

The pattern of service of individual physicians is not likely to conform to the areas outlined by definite political boundaries, but such units do represent divisions for which many statistics pertaining to population, economic resources, hospital facilities, and professional personnel are available. Indeed, these political units must be taken into account if local and provincial governments are to participate financially or administratively in implementing health service programs.

It was for this reason that the Survey Committee, in preparing its basic statistics, used counties and regional service groupings as a basis for certain computations.

The Concentration of Physicians

The preceding tables have indicated the

variation in distribution of doctors in various fields of work. A further demonstration is provided by Table E17. These variations reflect a certain rough pattern as just mentioned--more physicians in the areas containing the larger cities, in the centres where there are medical schools, and in those localities with well-developed hospital facilities. The concentration of specialists in certain parts is particularly striking.

This evidence can be obtained simply by comparing the proportion of the total population in the more urbanized areas with the proportion of civilian physicians who are in these areas (Table E17). This association is not simply one due to urbanization alone, but to the well-developed hospital and the medical service facilities in the more thickly populated and industrialized areas.

Variation in Ages of Physicians by Type of Locality

Of all physicians in active civilian practice in municipalities of 1,000 population or over, 9.5 per cent were 65 years of age or over, compared with 16.5 per cent in rural areas. For physicians in general practice 12.8 per cent of those in municipalities of 1,000 population or over were 65 years of age or over, compared with 17.0 per cent in rural areas. Of the 522 physicians in general practice in municipalities of less than 1,000 population and in rural areas, 24.7 per cent were under 35 years of age, while the largest age group among urban general practitioners was 35 - 44 years.

TABLE E18
DISTRIBUTION OF SELECTED GROUPS OF PHYSICIANS
BY AGE GROUP AND SIZE OF LOCALITY

AGE GROUP	SIZE OF MUNICIPALITY						TOTAL
	Over 100, 000	30, 000 100, 000	10, 000 30, 000	1, 000 10, 000	Total* Urban	Rural†	
	Physicians in Active Civilian Practice						
Under 35	16.9	17.5	19.8	22.5	18.4	21.8	18.8
35 - 44	28.9	34.9	32.7	26.5	30.0	22.6	29.2
45 - 54	24.4	21.5	24.6	23.4	23.8	21.3	23.5
55 - 64	20.0	18.1	14.7	16.5	18.3	17.8	18.2
65 - 74	8.4	6.7	5.6	8.6	7.8	12.2	8.3
75 & over	1.4	1.3	2.6	2.5	1.7	4.3	2.0
TOTAL (%)	100.0	100.0	100.0	100.0	100.0	100.0	100.0
TOTAL (No.)	2, 108	687	550	710	4, 055	540	4, 595
AGE GROUP	Physicians in General Practice						TOTAL
Under 35	19.7	21.2	25.6	23.4	22.0	24.7	22.6
35 - 44	26.0	29.7	31.9	26.2	27.5	20.7	26.0
45 - 54	19.6	19.8	17.9	22.7	20.3	20.1	20.2
55 - 64	20.5	15.3	14.0	16.0	17.4	17.4	17.4
65 - 74	11.5	9.9	6.6	9.7	9.9	12.1	10.4
75 & over	2.7	4.1	4.0	2.0	2.9	5.0	3.4
TOTAL (%)	100.0	100.0	100.0	100.0	100.0	100.0	100.0
TOTAL (No.)	740	222	301	538	1, 801	522	2, 323
AGE GROUP	Physicians in Specialist Practice						TOTAL
Under 35	14.2	16.2	12.2	7.3	14.0	(3)	14.1
35 - 44	32.9	37.5	34.0	20.7	33.3	(5)	33.3
45 - 54	26.5	22.6	32.7	41.5	27.3	(6)	27.3
55 - 64	18.2	18.6	14.7	18.3	17.9	(2)	17.8
65 - 74	7.6	5.1	5.8	7.3	6.8	(1)	6.8
75 & over	0.6	-	0.6	4.9	0.7	(0)	0.7
TOTAL (%)	100.0	100.0	100.0	100.0	100.0	100.0	100.0
TOTAL (No.)	835	296	156	82	1, 369	17	1, 386

†"Rural" includes municipalities of less than 1,000 estimated population, 1941 census.

*All incorporated cities and towns of 1,000 and over, 1941 census.

() Figures in parenthesis are actual number of doctors.

CHAPTER IV SPECIALIZATION

The proportion of physicians recorded as being in specialist private practice in 1948 is substantially greater than was found in the National Health Survey (1) as at March, 1943. At that time the figure for civilian physicians was 15.2 per cent. This excludes physicians in hospital practice and in the armed forces. Specialists in public health are not included in these figures.

During the past 25 years there has been a pronounced trend toward specialization. This is reflected in the current situation in United States and in Canada. "In the United States in 1923 only 15,408 physicians reported that they were confining their practice to a specialty; by 1931, 24,826 were in that category; in 1940, 36,880 physicians. By 1949, it was estimated that 50,000 were so limiting their practice--more than triple the number at the beginning of this period. This steady increase is reflected in the proportion of specialists relative to all physicians which has more than doubled during the 25 year period" (2).

In preparing tabulations of specialists, the doctor's statement as to the nature of his practice and the field in which he was practising was accepted. A separate tabulation was made of those holding specialist certificates with the Royal College of Physicians and Surgeons of Canada. A special tabulation was also made of those doctors who, although not certified, had special training in any specific field.

Physicians in Specialist Practice

On December 31, 1948, there were 1,386 physicians devoting the major portion of their time to private specialist practice. This is 30.2 per cent of all physicians in active civilian practice, the population-physician ratio being 3,070 (Table E10). In addition there were 240 physicians in hospital specialist practice. The distribution of these 1,626 physicians who comprise 35.4 per cent of physicians in active civilian practice, by type of specialty reported, is set out in Table E19.

These data relate to the specialties reported on the questionnaire; they therefore include combinations of specialties and certain fields not specifically defined by the Royal College of Physicians and Surgeons of Canada.

The age distribution of all physicians devoting the major portion of their time to a specialty is presented in Table E20. Of the 1,626 physicians in specialist practice, 111 or 6.8 per cent were 65 years of age or over. One-third were in the age group 35-44 years.

On examination of the ages of specialists in private practice in relation to all physicians in active civilian practice it is shown (Table E20), that 34.7 per cent of physicians in active civilian practice are at ages 55-64 devoting the major part of their time to private or hospital specialist practice, compared with 40.5 per cent at ages 45-54 and 41.3 per cent at ages 35-44. These figures are evidence of the increasing tendency to restrict practice to special fields.

Of all physicians in specialist practice (1,626), 1,386 or 85.8 per cent were in private practice. The distribution of these physicians by source of income is given in Table E21.

Certified Specialists

The tables on the number of physicians in specialist private practice, do not agree with the data for certified specialists as at December 31, 1948, for several reasons. A physician who holds a specialist certificate from the Royal College of Physicians and Surgeons of Canada may not practise his specialty, or he may hold his specialty certificate and be devoting a major portion of his time to something else, such as general practice. Also, some physicians are included in the specialists' practice section who did not as yet hold a certificate from the Royal College of Physicians and Surgeons, but who, having specified that they were devoting their time to a special field, have been so classified. There were 336 physicians in this category in Ontario on December 31, 1948.

Active physicians in Ontario who held specialist certificates from the Royal College of Physicians and Surgeons of Canada numbered 1,423 as of December 31, 1948. This figure is equivalent to 31.0 per cent of all physicians in active civilian practice.

Of the 1,423 physicians certified in a specialty on December 31, 1948, 1,043 were in

(1) *Report of the National Health Survey, 1943.*

(2) *Public Health Bulletin number 305, Health Service Areas - Estimates of Future Physician Requirements, published by the Federal Security Agency, Public Health Service, Washington, D.C., 1949. Authors - Mountain, J.W.; Pennell, E.H.; Berger, A.G.*

TABLE E19
DISTRIBUTION OF DOCTORS IN SPECIALIST PRACTICE

SPECIAL FIELD†	Private Practice		Hospital Practice		TOTAL	
	Number	Per Cent	Number	Per Cent	Number	Per Cent
Allergy	7	0.51	1	0.42	8	0.49
Anaesthesia	112	8.08	20	8.33	132	8.12
Anaesthesia, internal med.	2	0.14	-	-	2	0.12
Anaesthesia & internal med. (T.B.)	-	-	1	0.42	1	0.06
Anaesthesia & obstetrics	1	0.07	-	-	1	0.06
Anaesthesia & paediatrics	5	0.36	-	-	5	0.31
Bacteriology	-	-	4	1.67	4	0.25
Bacteriology & internal med. & path.	2	0.14	1	0.42	3	0.19
Bacteriology & pathology	4	0.29	7	2.92	11	0.68
Cardiology	11	0.79	2	0.83	13	0.80
Dermatology	6	0.43	-	-	6	0.37
Dermatology & syphilology	23	1.66	-	-	23	1.41
Diagnostic radiology	28	2.02	27	11.25	55	3.38
Diagnostic radiology & gen. surgery	1	0.07	-	-	1	0.06
Diagnostic radiology & int. medicine	2	0.14	3	1.25	5	0.31
Diagnostic radiology & therap. rad.	19	1.37	8	3.33	27	1.66
Gastro-enterology	3	0.22	1	0.42	4	0.25
General surgery	299	21.57	9	3.75	308	18.94
General surgery & gynaecology	10	0.72	1	0.42	11	0.68
General surgery, gynaecology & obstet.	5	0.36	1	0.42	6	0.37
General surgery & internal medicine	1	0.07	-	-	1	0.06
General surgery & neurosurgery	2	0.14	-	-	2	0.12
General & orthopaedic surgery	20	1.44	-	-	20	1.23
General, ortho. & plastic surgery	1	0.07	-	-	1	0.06
General, ortho. & thoracic surgery	2	0.14	-	-	2	0.12
General, ortho. surgery & urology	1	0.07	-	-	1	0.06
General & plastic surgery	4	0.29	-	-	4	0.25
General surgery & therapeutic rad.	1	0.07	1	0.42	2	0.12
General & thoracic surgery	1	0.07	3	1.25	4	0.25
General surgery & urology	7	0.51	-	-	7	0.43
Gynaecology	8	0.58	-	-	8	0.49
Gynaecology & obstetrics	123	8.88	2	0.83	125	7.69
Internal medicine	184	13.28	12	5.00	196	12.05
Internal medicine (T.B.)	7	0.51	43	17.91	50	3.07
Internal medicine (T.B.) & psychiatry	-	-	3	1.25	3	0.19
Neurology	4	0.29	-	-	4	0.25
Neurology & psychiatry	18	1.30	2	0.83	20	1.23
Neurosurgery	2	0.14	1	0.42	3	0.19
Obstetrics	24	1.73	-	-	24	1.48
Obstetrics & paediatrics	4	0.29	-	-	4	0.25
Obstetrics & surgery	3	0.22	-	-	3	0.19
Ophthalmology	54	3.90	2	0.83	56	3.44
Ophthalmology & otolaryngology	100	7.22	3	1.25	103	6.33
Orthopaedic surgery	12	0.87	2	0.83	14	0.86
Otolaryngology	52	3.75	4	1.67	56	3.44

†As reported by the physician

TABLE E19 (Cont'd)
DISTRIBUTION OF DOCTORS IN SPECIALIST PRACTICE

SPECIAL FIELD†	Private Practice		Hospital Practice		TOTAL	
	Number	Per Cent	Number	Per Cent	Number	Per Cent
Paediatrics	105	7.58	2	0.83	107	6.58
Pathology	2	0.14	15	6.25	17	1.05
Physical Medicine	4	0.29	5	2.08	9	0.55
Plastic surgery	7	0.51	-	-	7	0.43
Psychiatry	19	1.37	49	20.41	68	4.18
Rheumatic diseases	2	0.14	-	-	2	0.12
Therapeutic radiology	3	0.22	1	0.42	4	0.24
Urology	35	2.53	1	0.42	36	2.21
Others*	34	2.45	3	1.25	37	2.28
TOTAL	1,386	100.00	240	100.00	1,626	100.00
Population-physician ratio	3,070		17,700		2,617	

† As reported by the physician.

* Includes one each of--

Anaesthesia, obstetrics and gynaecology; cancer; communicable diseases and V.D.; dermatology and internal medicine; diabetes; diseases of metabolism and diabetes; endocrinology; endocrinology and vitaminology; general surgery and proctology; genito-urinary, skin and rectal; haematology; internal medicine, dermatology and syphilis; internal medicine and psychiatry; medical laboratory; neuro and thoracic surgery, neurology and nutrition; obstetrics, gynaecology and V.D.; oral surgery; with E. N. T.; orthopaedics and arthritis; paediatrics and allergy; proctology; psychiatry and mental hygiene; psychotherapy; radiology and electrocardiography; rheumatology and internal medicine; surgery and cardiology; surgery of hernia; traumatic and general surgery.

Includes two each of--

Arthritis; hygiene and industrial medicine; obstetrics, paediatrics and gynaecology.

TABLE E20
SPECIALISTS IN PRIVATE OR HOSPITAL PRACTICE AS AT DEC. 31, 1948

SPECIAL FIELD†	Age Group						TOTAL
	Under 35	35-44	45-54	55-64	65-74	75 & over	
Allergy	-	4	3	1	-	-	8
Anaesthesia	36	41	34	19	1	1	132
Anaesthesia & internal medicine	1	1	-	-	-	-	2
Anaesthesia & internal med. (T.B.)	-	1	-	-	-	-	1
Anaesthesia & obstetrics	-	1	-	-	-	-	1
Anaesthesia & paediatrics	1	3	1	-	-	-	5
Bacteriology	-	2	2	-	-	-	4
Bacteriology, internal med. & path.	1	-	-	1	1	-	3
Bacteriology & pathology	1	5	1	4	-	-	11
Cardiology	1	6	3	3	-	-	13
Dermatology	3	-	2	1	-	-	6
Dermatology & syphilology	5	6	10	2	-	-	23
Diagnostic radiology	9	25	8	9	3	1	55
Diagnostic rad. & general surgery	-	-	-	1	-	-	1
Diagnostic rad. & internal med.	1	-	3	1	-	-	5
Diagnostic & therapeutic radiology	5	7	11	4	-	-	27
Gastro-enterology	-	2	-	1	1	-	4
General surgery	26	105	82	70	25	-	308
General surgery & gynaecology	-	2	4	4	1	-	11
General surgery, gynaec. & obst.	-	3	-	1	2	-	6
General surgery & internal med.	-	-	1	-	-	-	1
General surg. & neurosurgery	-	1	1	-	-	-	2
General & orthopaedic surgery	3	7	8	1	1	-	20
General, orthop. & plastic surgery	-	-	1	-	-	-	1
General, orthop. & thoracic surg.	-	1	1	-	-	-	2
General, orthop. surg. & urology	-	1	-	-	-	-	1
General & plastic surgery	-	2	2	-	-	-	4
General surg. & therap. rad.	-	1	1	-	-	-	2
General & thoracic surgery	-	3	1	-	-	-	4
General surgery & urology	1	1	3	2	-	-	7
Gynaecology	-	-	4	2	2	-	8
Gynaecology & obstetrics	16	54	35	16	4	-	125
Internal medicine	33	66	51	32	13	1	196
Internal medicine (T.B.)	10	23	11	2	4	-	50
Internal medicine (T.B.) & psych.	-	2	1	-	-	-	3
Neurology	2	-	1	1	-	-	4
Neurology & psychiatry	1	9	2	5	3	-	20
Neurosurgery	-	1	1	1	-	-	3
Obstetrics	2	11	8	2	1	-	24
Obstetrics & paediatrics	3	-	1	-	-	-	4
Obstetrics & surgery	1	-	-	2	-	-	3
Ophthalmology	12	15	14	8	6	1	56
Ophthalmology & otolaryn.	3	14	34	31	16	5	103
Orthopaedic surgery	2	7	2	3	-	-	14
Otolaryngology	6	13	16	15	6	-	56

† As reported by the physician.

TABLE E20 (Cont'd)
SPECIALISTS IN PRIVATE OR HOSPITAL PRACTICE AS AT DEC. 31, 1948

SPECIAL FIELD†	Age Group						TOTAL
	Under 35	35-44	45-54	55-64	65-74	75 & over	
Paediatrics	21	45	22	15	4	-	107
Pathology	4	7	2	4	-	-	17
Physical medicine	1	3	3	2	-	-	9
Plastic surgery	2	2	2	-	1	-	7
Psychiatry	11	26	21	9	1	-	68
Rheumatic diseases	-	-	2	-	-	-	2
Therapeutic radiology	1	2	1	-	-	-	4
Urology	4	12	12	6	2	-	36
Others*	4	11	8	10	3	1	37
TOTAL	233	554	437	291	101	10	1,626
Per Cent in Each Age Group	14.3	34.1	26.9	17.9	6.2	0.6	100
Per Cent of Physicians in Active Civilian Practice by Age	27.0	41.3	40.5	34.7	26.5	10.6	35.4

† As reported by the physician.

* Includes one each of--

Anaesthesia, obstetrics and gynaecology; cancer; communicable diseases and V.D.; dermatology and internal medicine; diabetes; diseases of metabolism and diabetes; endocrinology; endocrinology and vitaminology; general surgery and proctology; genito-urinary, skin and rectal; haematology; internal medicine, dermatology and syphilis; internal medicine and psychiatry; medical laboratory; neuro and thoracic surgery; neurology and nutrition; obstetrics, gynaecology and V.D.; oral surgery with E.N.T.; orthopaedics and arthritis; paediatrics and allergy; proctology; psychiatry and mental hygiene; psychotherapy; radiology and electrocardiography; rheumatology and internal medicine; surgery and cardiology; surgery of hernia; traumatic and general surgery.

Includes two each of--

Arthritis; hygiene and industrial medicine; obstetrics, paediatrics and gynaecology.

TABLE E21

SPECIALISTS IN PRIVATE OR HOSPITAL PRACTICE BY TYPE OF WORK AND SOURCE OF INCOME

MAJOR TYPE OF WORK - SPECIALISTS†	Source of Income						TOTAL
	Priv. Prac.	Fed. Govt.	Prov. Govt.	Pub. Gen. Hosp. or San.	Priv. Hosp.	Other or N. S.	
Allergy	7	-	-	1	-	-	8
Anaesthesia	112	2	-	17	-	1	132
Anaesthesia & internal medicine	2	-	-	-	-	-	2
Anaesth., internal medicine (T.B.)	-	-	-	1	-	-	1
Anaesthesia & obstetrics	1	-	-	-	-	-	1
Anaesthesia & paediatrics	5	-	-	-	-	-	5
Bacteriology	-	1	-	3	-	-	4
Bact., internal med. & pathology	2	-	-	-	-	1	3
Bacteriology & paediatrics	-	-	-	-	-	-	-
Bacteriology & pathology	4	1	-	6	-	-	11
Cardiology	11	1	-	-	1	-	13
Dermatology	6	-	-	-	-	-	6
Dermatology & syphilology	23	-	-	-	-	-	23
Diagnostic radiology	28	4	-	22	-	1	55
Diagnostic rad. & general surgery	1	-	-	-	-	-	1
Diagnostic rad. & internal med.	2	-	3	-	-	-	5
Diagnostic & therapeutic radiology	19	-	-	7	-	1	27
Gastro-enterology	3	-	-	1	-	-	4
General surgery	299	6	-	2	-	1	308
General surgery & gynaecology	10	-	-	1	-	-	11
General surg., gynaec. & obstetrics	5	-	-	1	-	-	6
General surg. & internal medicine	1	-	-	-	-	-	1
General surg. & neurosurgery	2	-	-	-	-	-	2
General surg. & orthop. surgery	20	-	-	-	-	-	20
Gen., orthop. & thoracic surgery	1	-	-	-	-	-	1
General, orthop. & plastic surgery	2	-	-	-	-	-	2
General, orthop. surg. & urology	1	-	-	-	-	-	1
General surgery & plastic surgery	4	-	-	-	-	-	4
General surgery & therapeutic rad.	1	-	1	-	-	-	2
General surgery & thoracic surgery	1	-	-	3	-	-	4
General surgery & urology	7	-	-	-	-	-	7
Gynaecology	8	-	-	-	-	-	8
Gynaecology & obstetrics	123	-	-	-	1	1	125
Internal medicine	184	2	-	10	-	-	196
Internal medicine (T.B.)	7	1	7	34	-	1	50
Internal med. (T.B.) & psychiatry	-	-	3	-	-	-	3
Neurology	4	-	-	-	-	-	4
Neurology & psychiatry	18	1	-	-	1	-	20
Neurosurgery	2	-	1	-	-	-	3
Obstetrics	24	-	-	-	-	-	24
Obstetrics & paediatrics	4	-	-	-	-	-	4
Obstetrics & surgery	3	-	-	-	-	-	3
Ophthalmology	54	1	-	1	-	-	56
Ophthalmology & otolaryngology	100	-	-	3	-	-	103
Orthopaedic surgery	12	1	-	1	-	-	14
Otolaryngology	52	1	-	2	1	-	56

† As reported by the physician.

TABLE E21 (Cont'd)

SPECIALISTS IN PRIVATE OR HOSPITAL PRACTICE BY TYPE OF WORK AND SOURCE OF INCOME

MAJOR TYPE OF WORK - SPECIALISTS†	Source of Income						TOTAL
	Priv. Prac.	Fed. Govt.	Prov. Govt.	Pub. Gen. Hosp. or San.	Priv. Hosp.	Other or N. S.	
Paediatrics	105	-	-	2	-	-	107
Pathology	2	-	-	15	-	-	17
Physical medicine	4	3	-	2	-	-	9
Plastic surgery	7	-	-	-	-	-	7
Psychiatry	19	5	41	1	2	-	68
Rheumatic diseases	2	-	-	-	-	-	2
Therapeutic radiology	3	-	-	1	-	-	4
Urology	35	-	-	1	-	-	36
Others*	34	-	-	3	-	-	37
TOTAL	1,386	30	56	141	6	7	1,626

† As reported by the physician.

* Includes one each of--

Anaesthesia, obstetrics and gynaecology; cancer; communicable diseases and V.D.; dermatology and internal medicine; diabetes; diseases of metabolism and diabetes; endocrinology; endocrinology and vitaminology; general surgery and proctology; genito-urinary, skin and rectal; haematology; internal medicine, dermatology and syphilis; internal medicine and psychiatry; medical laboratory; neuro and thoracic surgery; neurology and nutrition; obstetrics, gynaecology and V.D.; oral surgery with E. N. T.; orthopaedics and arthritis; paediatrics and allergy; proctology; psychiatry and mental hygiene; psychotherapy; radiology and electrocardiography; rheumatology and internal medicine; surgery and cardiology; surgery of hernia; traumatic and general surgery.

Includes two each of--

Arthritis; hygiene and industrial medicine; obstetrics, paediatrics and gynaecology.

TABLE E22
CERTIFIED SPECIALISTS BY TYPE OF WORK AND CERTIFIED SPECIALTY

CERTIFIED SPECIALTY	TYPE OF WORK											TOTAL
	Gen. Prac.	Spec. * Prac.	Hosp. Prac.	Public Health	Ind. Med.	Med. Res.	Med. Teach.	Ins.	W. C. B.	Med. Adm.	Govt. Serv.	
Anaesthesia	21	96	17	-	-	-	-	-	-	-	3	137
Anaesthesia & int. med.	-	1	-	-	-	-	-	-	-	-	-	1
Anaesthesia & int. med. (TB)	-	-	1	-	-	-	-	-	-	-	-	1
Anaesthesia & paediatrics	-	2	-	-	-	-	-	-	-	-	-	2
Bacteriology	-	-	4	1	-	5	2	-	-	-	-	12
Bact. , path. & int. med.	-	3	1	-	-	-	-	-	-	-	-	4
Bacteriology & paediatrics	-	-	-	1	-	-	-	-	-	-	-	1
Bacteriology & pathology	-	7	18	7	-	1	-	-	-	2	-	35
Dermatology	-	1	-	-	-	-	-	-	-	-	-	1
Dermatology & syphilology	-	19	-	1	-	-	-	-	-	-	-	20
Diagnostic radiology	1	23	11	-	-	-	-	-	1	-	-	36
Diagnostic rad. & gen. surg.	-	1	-	-	-	-	-	-	-	-	-	1
Diagnostic rad. & int. med.	-	1	1	-	-	-	-	-	-	-	-	2
Diagnostic & therap. rad.	-	19	22	-	-	-	-	-	-	-	-	41
General surgery	40	235	11	1	3	-	1	-	-	-	-	291
General surgery & gyn.	-	5	-	-	-	-	-	-	-	-	-	5
General surgery, gyn. & obst.	-	3	-	-	-	-	-	-	-	-	-	3
General surg. & neurosurg.	-	3	1	-	-	-	-	-	-	-	-	4
General & ortho. surgery	-	21	3	-	-	-	1	-	-	-	-	25
General, ortho. & plas. surg.	-	1	-	-	-	-	-	-	-	-	-	1
General, ortho. & thor. surg.	-	2	-	-	-	-	-	-	-	-	-	2
General, ortho. surg. & urol.	-	1	-	-	-	-	-	-	-	-	-	1
General & plastic surgery	-	4	-	-	-	-	-	-	-	-	-	4
General surg. & therap. rad.	-	1	1	-	-	-	-	-	-	-	-	2
General & thoracic surgery	-	1	-	-	-	-	-	-	-	-	-	1
General surgery & urology	-	4	1	-	-	-	-	-	-	-	-	5
Gynaecology	2	6	-	-	-	-	-	-	-	-	-	8
Gynaecology & obstetrics	4	98	-	-	-	-	-	-	-	-	-	103
Internal medicine	11	144	16	-	2	5	6	1	-	-	3	188
Internal medicine (T. B.)	1	5	24	4	-	-	-	1	3	1	-	39

* Includes two certified in general surgery and practising urology, 1 certified in pathology and practising internal medicine, 1 certified in gynaecology and practising surgery, and 1 certified in pathology and bacteriology and practising internal medicine.

TABLE E22 (Cont'd)
CERTIFIED SPECIALISTS BY TYPE OF WORK AND CERTIFIED SPECIALTY

CERTIFIED SPECIALTY	TYPE OF WORK											TOTAL
	Gen. Prac.	Spec. * Prac.	Hosp. Prac.	Public Health	Ind. Med.	Med. Res.	Med. Teach.	Ins.	W. C. B.	Med. Adm.	Govt. Serv.	
Neurology	-	2	-	-	-	-	-	-	-	-	-	2
Neurology & psychiatry	-	17	4	-	-	1	-	-	-	-	3	25
Neurosurgery	-	1	-	-	-	-	-	-	-	-	-	1
Obstetrics	1	15	-	-	-	-	-	-	-	-	-	16
Ophthalmology	-	43	1	-	-	1	1	-	-	-	-	46
Ophthalmology & otolaryng.	-	67	3	-	-	-	-	-	-	-	-	70
Orthopaedic surgery	-	12	1	-	-	-	-	-	1	-	-	14
Otolaryngology	-	49	4	-	-	-	-	-	-	-	-	53
Paediatrics	1	74	3	1	-	2	-	-	-	-	1	82
Pathology	-	1	1	-	-	1	2	-	-	1	-	6
Physical medicine	-	3	3	-	-	-	-	-	-	-	-	6
Plastic surgery	-	3	-	-	-	-	-	-	-	-	-	3
Psychiatry	4	18	51	6	-	-	2	-	-	2	2	85
Psychiatry & int. med. (T.B.)	-	-	2	-	-	-	-	-	-	-	1	3
Therapeutic radiology	-	-	1	-	-	-	-	-	-	-	-	1
Urology	1	31	-	-	-	-	-	-	-	1	1	34
TOTAL	87	1,043	206	22	5	16	16	2	5	7	14	1,423

* Includes two certified in general surgery and practising urology, 1 certified in pathology and practising internal medicine, 1 certified in gynaecology and practising surgery, and 1 certified in pathology and bacteriology and practising internal medicine.

TABLE E23
ACTIVE PHYSICIANS CERTIFIED IN A SPECIALTY BY AGE

CERTIFIED SPECIALTY	Under 35	35-44	45-54	55-64	65 & * over	TOTAL
Anaesthesia	27	42	37	27	4	137
Anaesthesia & internal medicine	-	1	-	-	-	1
Anaesth. & internal medicine (T.B.)	-	1	-	-	-	1
Anaesthesia & paediatrics	-	2	-	-	-	2
Bacteriology	-	5	5	2	-	12
Bacter., internal med. & pathology	-	1	-	3	-	4
Bacteriology & paediatrics	-	1	-	-	-	1
Bacteriology & pathology	2	17	7	8	1	35
Dermatology	-	-	1	-	-	1
Dermatology & syphilology	4	7	7	2	-	20
Diagnostic radiology	4	18	7	5	2	36
Diagnostic rad. & general surgery	-	-	1	-	-	1
Diagnostic rad. & internal medicine	-	-	2	-	-	2
Diagnostic & therapeutic radiology	6	13	13	7	2	41
General surgery	17	97	79	71	27	291
General surgery & gynaecology	-	1	2	2	-	5
General surg., gynaec. & obstetrics	-	2	-	1	-	3
General surgery & neurosurgery	-	2	1	1	-	4
General & orthopaedic surgery	2	10	10	2	1	25
Gen., orthop. & plastic surgery	-	-	1	-	-	1
Gen., orthop. & thoracic surgery	-	1	1	-	-	2
Gen., orthop. surgery & urology	-	1	-	-	-	1
General & plastic surgery	-	2	2	-	-	4
General surgery & therap. radiology	-	1	1	-	-	2
General & thoracic surgery	-	1	-	-	-	1
General surgery & urology	-	2	2	1	-	5
Gynaecology	-	1	2	2	3	8
Gynaecology & obstetrics	5	43	33	19	3	103
Internal medicine	23	63	62	27	13	188
Internal medicine (T.B.)	-	14	18	5	2	39
Internal med. (T.B.) & psychiatry	-	1	1	1	-	3
Neurology	-	-	1	1	-	2
Neurology & psychiatry	1	9	4	8	3	25
Neurosurgery	-	-	1	-	-	1
Obstetrics	-	6	8	1	1	16
Ophthalmology	6	16	14	6	4	46
Ophthalmology & otolaryngology	1	9	26	24	10	70
Orthopaedic surgery	2	7	2	3	-	14
Otolaryngology	4	16	17	11	5	53
Paediatrics	8	38	19	16	1	82
Pathology	-	1	2	3	-	6
Physical medicine	-	3	2	1	-	6
Plastic surgery	-	2	1	-	-	3
Psychiatry	6	37	28	12	2	85
Therapeutic radiology	-	1	-	-	-	1
Urology	2	11	12	7	2	34
TOTAL	120	506	432	279	86	1,423
Per Cent in Each Age Group	8.4	35.6	30.4	19.6	6.0	100.0
Per Cent of Physicians in Active Civilian Practice by Age	13.9	37.8	40.0	33.3	18.1	31.0

* Includes 4 physicians at ages 70-79 years.

TABLE E24

ACTIVE PHYSICIANS CERTIFIED IN A SPECIALTY BY RESIDENCE AND AGE

RESIDENCE	Age					TOTAL
	Under 35	35-44	45-54	55-64	65 & over*	
Bruce	-	-	1	-	-	1
Elgin	1	3	5	2	-	11
Essex	-	10	17	13	2	42
Huron	-	-	2	1	1	4
Kent	-	3	3	3	2	11
Lambton	2	13	3	1	1	20
Middlesex	9	45	29	25	4	112
Oxford	1	6	3	2	-	12
Perth	-	1	4	1	2	8
REGION 1 TOTAL	13	81	67	48	12	221
Brant	1	6	7	3	1	18
Haldimand	-	-	-	1	-	1
Halton	-	2	1	-	1	4
Lincoln	-	12	7	3	1	23
Norfolk	-	-	-	1	-	1
Welland	2	6	12	3	-	23
Wentworth	10	30	36	20	5	101
REGION 2 TOTAL	13	56	63	31	8	171
Dufferin	1	-	-	-	-	1
Durham	-	-	-	1	-	1
Grey	-	4	5	2	-	11
Haliburton	-	-	-	-	-	0
Muskoka	-	2	1	-	-	3
Nipissing	-	1	2	1	-	4
Northumberland	-	1	-	-	-	1
Ontario	1	6	5	2	1	15
Parry Sound	-	-	1	-	-	1
Peel	-	-	-	1	-	1
Peterborough	3	11	3	6	1	24
Simcoe	-	3	5	2	-	10
Victoria	-	2	1	1	-	4
Waterloo	2	7	8	7	-	24
Wellington	-	7	6	3	1	17
York	61	210	172	111	40	594
REGION 3 TOTAL	68	254	209	137	43	711

*Includes 4 physicians ages 70-79 years.

TABLE E24 (Cont'd)

ACTIVE PHYSICIANS CERTIFIED IN A SPECIALTY BY RESIDENCE AND AGE

RESIDENCE	Age					TOTAL
	Under 35	35-44	45-54	56-64	65 & over*	
Grenville	-	-	-	-	-	0
Frontenac	3	17	16	12	2	50
Hastings	-	7	2	3	1	13
Leeds	-	-	5	4	-	9
Lennox & Addington	-	-	-	-	-	0
Prince Edward	-	-	-	1	1	2
REGION 4 TOTAL	3	24	23	20	4	74
Carleton	14	50	39	28	12	143
Dundas	-	-	-	-	-	0
Glengarry	-	-	-	1	-	1
Lanark	-	-	-	-	1	1
Prescott	1	-	-	-	-	1
Renfrew	-	1	-	-	-	1
Russel	-	-	-	-	-	0
Stormont	-	3	5	3	1	12
REGION 5 TOTAL	15	54	44	32	14	159
Algoma	2	2	1	1	1	7
Cochrane	-	9	2	2	1	14
Manitoulin	-	-	-	-	-	0
Sudbury	3	16	10	4	-	33
Timiskaming	-	1	4	1	-	6
REGION 6 TOTAL	5	28	17	8	2	60
Kenora	-	-	1	-	-	1
Rainy River	-	-	-	-	-	0
Thunder Bay	3	12	5	3	3	26
Patricia	-	-	-	-	-	0
REGION 7 TOTAL	3	12	6	3	3	27
GRAND TOTAL	120	509	429	279	86	1,423

*Includes 4 physicians ages 70-79 years.

TABLE E25

PHYSICIANS WITH SPECIAL TRAINING BY TYPE OF WORK

TYPE OF WORK	Special Training			Total Physicians in Active Civilian Practice
	Certified	Not Certified	Total	
General Practice	8	699	707	2,323
Specialist, private practice	45	320	365	1,386
Specialist, hospital practice	-	72	72	240
Other hospital practice	4	29	33	119
Public health	2	88	90	145
Industrial medicine	-	35	35	63
Research	-	27	27	60
Teaching	1	24	25	58
Insurance	-	12	12	23
Workmen's Compensation Board	1	7	8	22
Medical administration	2	36	38	62
Government service	-	20	20	77
Other and unspecified	-	3	3	17
TOTAL	63	1,372	1,435	4,595

specialist private practice and 206 in specialist practice in hospitals. The remainder (174) were distributed by major field of work, as follows: 87 in general practice, 22 in public health, 5 in industrial medicine, 16 in medical research, 16 in medical teaching, 2 in insurance, 5 with the Workmen's Compensation Board, 7 in medical administration and 14 in other types of government service not stated elsewhere (Table E22).

The numbers certified in the basic specialties can be obtained from the distribution given in the table. Eighty-five doctors were certified in psychiatry and 25 in neurology and psychiatry. Six were certified in pathology and 35 in bacteriology and pathology.

The age distribution of certified specialists by type of specialty is set out in Table E23. Of the 1,423 certified specialists, 86 or 6.0 per cent were 65 years of age or over and 35.6 per cent were in the age group 35-44 years.

It is noteworthy that 40.0 per cent of all physicians in active civilian practice at ages 45-54 years hold a specialist certificate of some type from the Royal College of Physicians and Surgeons of Canada.

The distribution of all certified specialists by age and county or district of residence is set out in Table E24. This table reflects the concentration of certified specialists by county, district and region. Three counties and two districts had no certified specialist at the time of the survey. Twelve other counties and one district had only one.

Special Training

In order to secure information regarding special training which physicians had in any field, physicians were asked the following question on the

survey enquiry form:

"If you have no specialist certificate but have special training in a particular field, name the field."

The replies were tabulated as recorded, separate from and in addition to the data on specialists. It was found that of 4,595 physicians in active civilian practice (excluding medical officers in the armed forces, internes, residents and fellows), 1,435 or 31.2 per cent had special training of some sort in a particular field apart from the certified specialty.

The distribution of these 1,435 physicians by type of work is presented in Table E25.

Of the 1,435 physicians reporting special training in some particular field, 63 were also certified in a specialty by the Royal College of Physicians and Surgeons of Canada. Of the 1,372 physicians who were not certified but who reported special training, 699 were devoting their major attention to general practice, 320 to specialist private practice, and 72 to hospital specialist practice.

The significant point of interest is the fact that out of 2,323 physicians whose major field of work is general practice, 699 or 30 per cent reported having special training.

The types of special training reported by the 1,435 physicians is set out in Table E26 by region. The variations in the ratio of physicians with special training to all physicians in active civilian practice in the regions are indicated at the foot of the table.

A summary of the data on physicians with a specialist certificate or with special training is given in Table E27. The distribution of this group by county or district of residence, showing the large cities and towns has also been prepared by the Survey Committee and has been forwarded to the Minister of Health for Ontario.

TABLE E26

PHYSICIANS REPORTING SPECIAL TRAINING BY TYPE OF TRAINING AND RESIDENCE

SPECIAL TRAINING	REGION							TOTAL
	1	2	3	4	5	6	7	
Administration	4	4	9	3	6	1	-	27
Allergy	3	2	3	-	1	-	-	9
Anaesthesia	15	13	46	5	9	5	7	100
Anaesthesia & obstetrics	1	-	2	1	1	1	1	7
Anaesthesia & paediatrics	1	1	-	1	-	-	-	3
Aviation medicine	2	1	2	-	6	-	-	11
Bacteriology	1	-	6	-	-	-	-	7
Bacteriology & pathology	1	-	1	-	1	-	-	3
Cardiology	9	2	8	3	5	-	-	27
Communicable diseases incl. V. D.	2	2	4	1	1	1	-	11
Dermatology	1	2	8	1	-	-	-	12
Dermatology & syphilology	3	1	2	-	1	-	-	7
Diabetes	-	-	6	-	-	-	-	6
Diagnostic radiology	5	6	10	3	3	2	1	30
Diagnostic and ther. radiology	1	-	-	-	-	-	-	1
Gastro-enterology	-	-	4	-	-	-	-	4
General surgery	52	24	103	10	31	21	5	246
General surgery & gynaecology	3	1	3	-	2	-	1	10
General surgery, gyn. & obstet.	-	2	3	-	-	-	-	5
General & orthopaedic surgery	-	1	2	-	1	-	-	4
General surgery & urology	1	2	1	-	-	-	-	4
Gynaecology	-	1	5	-	1	-	1	8
Gynaecology & obstetrics	13	7	29	3	8	7	1	68
Industrial medicine & hygiene	9	7	17	2	6	3	3	47
Internal medicine	10	6	53	4	12	3	2	90
Internal medicine (T. B.)	12	9	42	2	6	4	4	79
Neurology	-	2	1	1	-	-	-	4
Neurology & psychiatry	-	-	1	1	-	-	-	2
Obstetrics	9	5	27	2	10	6	3	62
Obstetrics & paediatrics	1	3	2	1	-	1	-	8
Obstetrics & surgery	5	1	3	-	3	2	1	15
Ophthalmology	5	3	8	2	1	1	1	21
Ophthalmology & otolaryngology	10	3	10	1	3	4	1	32
Orthopaedic surgery	1	1	5	1	1	1	-	10
Otolaryngology	-	1	11	1	-	-	-	13
Paediatrics	7	9	30	3	6	3	1	59
Pathology	3	2	3	1	1	-	-	10
Physical medicine	2	1	5	-	1	-	-	9
Plastic surgery	1	1	3	-	-	-	-	5
Proctology	-	2	1	-	1	-	-	4
Psychiatry	11	3	22	4	4	-	1	45
Public health	13	14	56	4	15	3	3	108
Rheumatic diseases	-	3	3	-	2	-	-	8
Therapeutic radiology	2	-	1	-	1	-	-	4
Urology	1	2	4	1	2	1	-	11
Other	23	16	100	6	23	8	3	179
TOTAL	243	166	665	68	175	78	40	1,435
Per Cent of all Physicians in Active Civilian Practice	30.3	28.2	31.5	29.7	34.5	34.5	30.3	31.2

TABLE E27
PHYSICIANS WHO HAVE SPECIALIST CERTIFICATE OR SPECIAL TRAINING BY SPECIALTY

SPECIFIED SPECIALTY OR SPECIAL TRAINING	Certified in Specified Specialty		Special Training in Specified Specialty			Special Training but not Certified	Certified and Having Special Training
	Practising* in Specialty	Not Practising in Specialty	Total	Practising in Specialty	Not Practising in Specialty	Total	
Administration	-	-	-	22	5	27	1
Allergy	-	-	-	6	3	9	-
Anaesthesia	112	25	137	23	77	100	2
Anaesthesia & obstetrics	-	-	-	1	6	7	-
Anaesthesia & paediatrics	2	-	2	1	2	3	-
Aviation medicine	-	-	-	-	11	11	-
Bacteriology	3	9	12	2	5	7	-
Bact., path. & int. med.	4	-	4	-	-	-	-
Bacteriology & pathology	25	10	35	2	1	3	-
Cardiology	-	-	-	11	16	27	-
Comm. dis., incl. V. D.	-	-	-	3	8	11	4
Dermatology	1	-	1	4	8	12	-
Dermatology & syphilology	19	1	20	5	2	7	-
Diabetes	-	-	-	1	5	6	-
Diagnostic radiology	34	2	36	10	20	30	4
Diagnostic & ther. rad.	40	1	41	-	1	1	-
Gastro-enterology	-	-	-	3	1	4	2
General surgery	243	48	291	62	184	246	2
General surgery & gynaec.	5	-	5	3	7	10	-
Gen. surg., obs. & gyn.	3	-	3	1	4	5	-
Gen. & ortho. surgery	24	1	25	2	2	4	-
Gen. & plastic surgery	4	-	4	-	-	-	1
Gen. surg. & urology	5	-	5	2	2	4	-
Gynaecology	6	2	8	3	5	8	1
Gynaecology & obstetrics	98	5	103	28	40	68	2

*In private or hospital practice.

TABLE E27 (Cont'd)

PHYSICIANS WHO HAVE SPECIALIST CERTIFICATE OR SPECIAL TRAINING BY SPECIALTY

SPECIFIED SPECIALTY OR SPECIAL TRAINING	Certified in Specified Specialty			Special Training in Specified Specialty			Special Training but not Certified	Certified and Having Special Training
	Practising* in Specialty	Not Practising in Specialty	Total	Practising in Specialty	Not Practising in Specialty	Total		
Industrial med. & hygiene	-	-	-	20	27	47	47	-
Internal medicine	158	30	188	39	51	90	88	2
Internal medicine (T. B.)	24	15	39	39	40	79	76	3
Neurology	2	-	2	2	2	4	3	1
Neurology & psychiatry	20	5	25	1	1	2	2	-
Obstetrics	15	1	16	10	52	62	61	1
Obstetrics & paediatrics	-	-	-	3	5	8	7	1
Obstetrics & surgery	-	-	-	2	13	15	15	-
Ophthalmology	44	2	46	14	7	21	15	6
Ophthalmology & otolar'y	70	-	70	21	11	32	32	-
Orthopaedic surgery	13	1	14	-	10	10	10	-
Otolaryngology	53	-	53	7	6	13	13	-
Paediatrics	76	6	82	28	31	59	58	1
Pathology	2	4	6	4	6	10	9	1
Physical medicine	6	-	6	4	5	9	9	-
Plastic surgery	3	-	3	4	1	5	4	1
Proctology	-	-	-	1	3	4	2	2
Psychiatry	54	31	85	20	25	45	43	2
Public Health	-	-	-	67	41	108	104	4
Rheumatic disease	-	-	-	3	5	8	7	1
Rheumatic disease	1	-	1	4	-	4	3	1
Therapeutic radiology	31	3	34	3	8	11	8	3
Urology	18	3	21	37	142	179	165	14
Other	-	-	-	-	-	-	-	-
TOTAL	1,218**	205	1,423	528	907	1,435	1,372	63

*In private or hospital practice.

**Includes two certified in general surgery and practising urology, one certified in pathology and practising internal medicine, one certified in gynaecology and practising surgery, one certified in pathology and bacteriology and practising internal medicine.

CHAPTER V

MEDICAL MANPOWER NEEDS

The Survey Committee sought information on the need for physicians throughout the province by seeking the comment of certain official and voluntary agencies, by specific enquiry of all physicians in Ontario as to their opinion on the need for doctors in their areas, and by examination of data recorded in the survey in relation to any standards set up elsewhere.

Physician-Population Ratios as Standards of Adequacy

No arbitrary yardstick is completely satisfactory as a measure of the adequacy of medical service, but the relationship of the number of doctors to the total population in any area or in the province as a whole is a useful guide. Ratios of doctors in any area to the population in that area, become less and less useful as the size of the area becomes smaller or more highly urbanized. This is especially true in a hospital or in a university centre. In assessing local needs, arbitrary ratios are almost certain to mislead. The many contingent factors affecting distribution demand a careful local study and on-the-spot survey in order to secure a good assessment of local needs.

Opinions vary extensively on the number of physicians required to provide adequate medical care (1). Attention may be directed to the work of Lee and Jones published as part of the work of the Committee on the Costs of Medical Care (2). Their report indicates that 142 physicians per 100,000 persons (704 persons per doctor) would be necessary to provide all persons with the essential medical care. The 142 physicians would consist of 116 general practitioners and 26 physicians engaged in the practice of the various medical specialties.

In the 1945 Hospital Review, published by the American Hospital Association, it was suggested that from 18 to 20 physicians, of whom three of five might be specialists, would be needed to serve 20,000 to 25,000 persons (3). This is a ratio of 800 persons per physician. It was assumed, however, that facilities in more fully developed hospital and medical centres would be available to provide the rare and highly developed specialty services.

The United States Public Health Service has set out certain standard population-physician ratios and these include provision, for example, for one general practitioner for every 1,500 persons. On December 31, 1948, there were 1,832 persons per general practitioner in Ontario.

Reports from Agencies

In response to inquiry by the Survey Committee, the Federated Women's Institutes of Ontario submitted a brief dealing with the adequacy of medical care in rural parts of the province. They were of the opinion that the services of more physicians were required in rural Ontario, and they urged that, to accomplish this, special encouragement in the form of bursaries should be given medical students from rural areas. They also suggested that a system of subsidies should be established to assist doctors who are willing to serve the more isolated and sparsely settled parts of the province. It was thought, too, that a system whereby all medical students would spend a part of their internship under approved country doctors would help to increase the flow of new medical graduates to such practices.

The Ontario Medical Association supplied the Survey Committee with a list of 31 villages and towns which had been reported to them as needing the services of additional doctors; and 20 towns and cities where young doctors were needed to fill assistantships. Many of the requests for further medical services came from private citizens, some were from municipal officials and chambers of commerce, a few from doctors themselves, and a number appeared on the list as a result of investigations made by the Ontario Medical Association.

Comments of Physicians on the Need for Doctors

In the Survey questionnaire, physicians were asked to express an opinion concerning the distribution of general practitioners and specialists in their areas.

A total of 3,443 physicians expressed an opinion regarding the need for general practitioners.

- (1) *Public Health Bulletin number 305, Health Service Areas - Estimates of Future Physician Requirements, published by the Federal Security Agency, Public Health Service, Washington, D.C., 1949. Authors—Mountain, J.W.; Pennell, E.H.; Berger, A.G.*
- (2) *Lee, Roger I.; and Jones L.W.; Publication No. 22 of the Committee on the Costs of Medical Care. University of Chicago Press, Chicago, 1933.*
- (3) *American Hospital Association, 1945 Hospital Review, pp. 15-24, Sept. 1945.*

Only 232 out of these 3,443 physicians expressed an opinion that general practitioner services were inadequate. The need for general practitioners, as reflected by the physicians' statements, was not dangerously urgent anywhere, but there appeared to be a mild shortage in 11 counties and districts.

A total of 3,171 physicians expressed an opinion about the need for specialist services. Of this number, 639 felt that specialist services were not adequate. This is twice the number of doctors stating that general practitioners' services were not adequate. The observations made reflect a need for additional specialist services in pathology, diagnostic radiology, dermatology, paediatrics, general surgery, psychiatry, ophthalmology, otolaryngology, and internal medicine.

Evidence from the Work of Other Committees

Other sections of this report provide figures on the estimated numbers of physicians now required in certain special fields. It was indicated, for example, that 157 psychiatrists, 22 pathologists, 25 radiologists, 28 specialists in public health, and 6 specialists in physical medicine were required.

The Survey Committee felt that the need for general practitioners should be stressed more than that of certain specialties. With few exceptions

(psychiatry, pathology, and public health) the need for general practitioners was of significantly greater importance.

The figures produced by the Survey show that there were only 2,323 doctors who were devoting the major part of their time to general practice. This is a population-physician ratio of 1,832. This ratio is unexpectedly large and indicates an overall need for general practitioners. This is supported by the United States Public Health Service ratio of one general practitioner per 1,500 population.

Significance of the Apparent Need for Physicians

The available information suggests a modest need for physicians now and an acute need in certain special fields--psychiatry, pathology, and public health. If the loss sustained by the emigration of trained physicians to the United States and to other provinces were reduced, it would not be necessary to increase the number of medical graduates. The development or extension of medical schools in other parts of Canada will undoubtedly materially influence the net production of physicians for Ontario over the next few years. There is no way, however, in which the future trend can be estimated with certainty.

If, on the other hand, emigration of medical graduates trained in Ontario were to con-

TABLE E28

DEATHS AMONG MALE PHYSICIANS IN ONTARIO BY AGE GROUP

YEAR	AGE GROUP						TOTAL
	Under 35	35-44	45-54	55-64	65-74	75 & over	
1934	5	3	3	25	29	25	90
1935	6	7	9	19	25	28	94
1936	2	6	6	18	14	22	68
1937	2	7	12	21	24	24	90
1938	2	4	13	18	27	18	82
Average 1934-38	3.4	5.4	8.6	20.2	23.8	23.4	84.8
1939	3	2	11	25	24	23	88
1940	-	4	18	16	23	28	89
1941	-	6	9	17	29	28	89
1942	1	6	7	22	22	15	73
1943	1	3	16	20	22	23	85
Average 1939-43	1.0	4.2	12.2	20.0	24.0	23.4	84.8
1944	-	5	12	15	21	25	78
1945	1	6	12	19	24	22	84
1946	1	2	13	15	32	20	83
1947	4	3	10	20	19	27	83
1948	1	2	12	24	26	17	82
Average 1944-48	1.4	3.6	11.8	18.6	24.4	22.2	82.0
TOTAL	29	66	163	294	361	345	1,258

TABLE E29

PHYSICIANS NOT IN PRACTICE BY AGE GROUP AND SEX

AGE	Male	Female	TOTAL	
			Number	Per Cent
Under 35	4	21	25	6.5
35-44	8	14	22	5.7
45-54	20	14	34	8.9
55-64	50	10	60	15.7
65-74	89	9	98	25.6
75 & over	85	4	89	23.2
Not stated	50	5	55	14.4
TOTAL	306	77	383	100.0

TABLE E30

REASON FOR RETIREMENT OF PHYSICIANS NOT IN PRACTICE UNDER AGE 64

REASON	Under 35	35-44	45-54	55-64	TOTAL
Married	21	14	14	10	59
Ill-health	1	1	6	10	18
Business	-	-	2	2	4
Other reasons	-	1	3	4	8
No reason given	3	6	9	34	52
TOTAL	25	22	34	60	141

tinue, consideration should be given to enlarging the output of existing medical schools, or the opening of new medical schools.

Medical Manpower Wastage

There are three components in the manpower wastage picture--death, emigration and retirement.

Deaths Among Physicians

The average annual numbers of deaths of male physicians by age during the 15 years 1934 to 1948 inclusive are set out by ten-year age groups in Table E28.

The annual number of deaths, including female physicians, is about 85 physicians per year. This figure may be expected to increase slightly, but the increase will not be great.

Emigration of Physicians

Accurate information on emigration and immigration of physicians is not available. The data on the medical school output has shown that 34.4 per cent of the graduates of Ontario medical schools in the last 14 years have left Ontario for

the United States or other provinces of Canada--17.2 per cent to the United States and 17.2 per cent to other provinces.

Retirement of Physicians

It is difficult to obtain accurate data on the retirement of physicians. A doctor may simply curtail his practice and remain in partial retirement for many years. An effort was made to secure information on retirements in the questionnaire sent to all doctors in Ontario.

There were 383 retired physicians in Ontario as at December 31, 1948. This is 6.8 per cent of all physicians in Ontario. This compares with a figure of 5.7 per cent for Canada in September, 1948.

Ages of Physicians Not in Practice

The 383 physicians recorded in the survey as "not in practice" or "retired" are distributed by age in Table E29.

The stated reasons for retirement for the 141 physicians not in practice at ages under 64 years were as in Table E30.

CHAPTER VI

MEDICAL MANPOWER EDUCATION

There are four medical schools in Ontario--Queen's, Toronto, Western Ontario and Ottawa. (The first graduates from the latter will complete the medical course during the term 1950-51).

Data on the output of graduates from Ontario's medical schools during the period 1920-1948, together with estimates for the years 1949-1952, are given in Table E31.

During the war and post-war period, acceleration of teaching programs and financial aid to veterans of World War II through the Department of Veterans' Affairs had a strong influence on the output of medical graduates. In future, the expansion of the facilities for medical education in Saskatchewan and in British Columbia, as well as in Ontario, will be important in the long-term maintenance of the volume of medical graduates required for the next few years, for these developments may well reduce the total migration of medical students from Ontario after graduation.

There have been variations in the total output--one increase after World War I in the years 1923 to 1926, and another with the commencement of accelerated courses in 1943. The latter was compensated by slow-up to pre-war rate in the 1948 output.

Noteworthy is the increasing output of the University of Western Ontario Medical School from 10 to 50. Also noteworthy is the definite tendency of the output of the University of Toronto Medical School to stabilize at a lower level--falling from around 200 in the period 1927-1934 to something under 150 per year.

The number of medical students is restricted because teaching facilities are limited.

Emigration of Medical Graduates

In past years, the output of Ontario medical schools has suffered a substantial drain to other provinces and to the United States. This is well illustrated by Table E32, in which is set out the percentage distribution of graduates over the past 14 years.

The percentage distribution of the output of each Ontario medical school over the past 14 years is set out in Table E33.

Of our medical manpower production in the past 14 years, 17.2 per cent have gone to the

United States and 17.2 per cent to other provinces of Canada.

These figures illustrate how the present medical manpower position could be improved if more of the graduates of Ontario medical schools remained in Ontario. Ontario medical schools have been producing doctors each year at more than twice the rate at which physicians are dying (average 85 per year). From 1951 on, the production rate will be three times the number of deaths among doctors in Ontario.

Possible Output of the Future

The dean of each medical school in Ontario was invited to express an opinion regarding the problems of production and supply of doctors. Their replies have been forwarded to the Minister of Health for Ontario, but they may be summarized as follows:

The Ontario medical schools cannot "with advantage either to the students or to the community at large, increase the present output". The top limit of graduates which can be trained with present facilities is stated to be: Toronto, 150; Queen's, 50; Western, 50; Ottawa, 50. The University of Toronto Medical School is the largest medical school on the continent--its output should not be increased. The three smaller medical schools could not expand without additional funds for increased facilities; even then the expansion could only be of minor degree due to limitations in teaching material.

The Survey Committee concluded that an increase in medical school output could be achieved not merely by enlarging present schools but by the establishment of additional ones.

Immigration of Physicians

Available data show that Ontario does receive a significant number of doctors from the United Kingdom, the United States and other provinces, but this is by no means equal to the numbers trained in Ontario who go elsewhere.

A special analysis of new registrations was made through the co-operation of the College of Physicians and Surgeons of Ontario. This study showed that of 857 new registrations received in the years 1935, 1939, 1945 and 1948, Ontario medical school graduates accounted for 712, of who 534 were still in Ontario (75%). In addition, 125 graduates from medical schools outside Ontario registered in these years, and of these 78 (62 per cent) were

TABLE E31

GRADUATES OF ONTARIO MEDICAL SCHOOLS*, 1920 - 1952

YEAR	MEDICAL SCHOOLS				TOTAL
	Ottawa	Queen's	Toronto	Western	
1920	-	24	86	10	120
1921	-	46	185	10	241
1922	-	45	196	17	258
1923	-	37	257	24	318
1924	-	66	298	24	388
1925	-	-	209	22	231
1926	-	52	264	17	333
1927	-	45	174	25	244
1928	-	57	192	31	280
1929	-	54	189	25	268
1930	-	46	189	27	262
1931	-	44	212	38	294
1932	-	46	220	34	300
1933	-	48	210	37	295
1934	-	45	174	25	244
1935	-	47	110	33	190
1936	-	45	126	27	198
1937	-	46	109	46	201
1938	-	52	119	34	205
1939	-	45	129	29	203
TOTAL 1920 - 1939	-	890	3,648	535	5,073
1940	-	58	138	29	225
1941	-	44	138	30	212
1942	-	39	114	36	189
1943	-	93	209	61	363
1944	-	40	127	37	204
1945	-	44	120	33	197
TOTAL 1940 - 1945	-	318	846	226	1,390
1946	-	40	135	38	213
1947	-	39	127	34	200
1948	-	-	125	40	165
1949	-	50	145	55	250
1950	-	50	140	75	265
1951	50	50	150	50	300
1952	50	50	175	50	325
TOTAL 1946 - 1952	100	279	997	342	1,718
GRAND TOTAL 1920 - 1952	100	1,487	5,491	1,103	8,181

*From "Survey of Physicians in Canada, September, 1948", published by the Department of National Health and Welfare, Ottawa.

TABLE E32

PERCENTAGE DISTRIBUTION OF ONTARIO'S TOTAL MEDICAL SCHOOL OUTPUT, 1935-48

YEAR	Ontario	U. S. A.	Other Provinces	Elsewhere*	TOTAL
1935	69.7	13.5	12.5	4.3	100.0
1936	63.2	19.9	12.9	4.0	100.0
1937	58.3	22.6	15.2	3.9	100.0
1938	52.9	31.4	12.6	3.1	100.0
1939	60.4	19.3	16.0	4.3	100.0
1940	60.8	19.4	12.9	6.9	100.0
1941	62.3	13.6	21.1	3.0	100.0
1942	69.0	10.7	18.7	1.6	100.0
1943	66.0	9.7	18.5	5.8	100.0
1944	56.2	19.1	16.5	8.2	100.0
1945	54.5	13.6	24.6	7.3	100.0
1946	53.8	18.3	22.6	5.3	100.0
1947	52.6	19.4	21.9	6.1	100.0
1948	66.9	16.0	13.0	4.1	100.0
TOTAL	60.7	17.2	17.2	4.9	100.0

*Includes dead or no address.

still in Ontario. Of those physicians registering with the College for the first time in these years, therefore, 612 were still in Ontario, and of these 78 or 12.7 per cent were graduates of medical schools outside Ontario or outside Canada. In other words, for every hundred graduates of Ontario medical schools who remain in Ontario, there are 14.6 from outside Ontario who stay.

Effect of Population Trends

There is currently in progress a downward trend in the proportion of the male and female population in the age-group 15-24 years, from which medical students are recruited. This is a significant fact for it will most certainly be a factor in determining the future supply of potential medical students.

Problems of the Medical Schools

From the replies of the deans of the medical schools some of the problems presently faced by the medical schools were made evident.

These include congestion of present facilities, limitations of clinical facilities, etc.

Sources of Ontario Medical Students

Data on the numbers of undergraduate students who come to Ontario medical schools from other parts of Canada and from other countries were obtained from the deans of the four Ontario medical schools. These apply to the academic year 1948-49, and they are summarized in Table E34, as follows:

During the academic year 1948-49, 84.2 per cent of the students were from Ontario. Only 12 out of 1,848 (0.7 per cent) were from the U. S., but 268 (14.5 per cent) were from other provinces. These figures suggest that the loss of medical graduates to other provinces may be fairly well balanced by students from those provinces. The loss to the U. S., however, cannot be attributed to repatriation of American students after graduation. It is a clear loss of Canadian doctors.

The deans of the medical schools also supplied information on the source of undergraduate

TABLE E33

PERCENTAGE DISTRIBUTION OF OUTPUT OF EACH ONTARIO MEDICAL SCHOOL, 1935-1948

SCHOOL	Ontario	U. S. A.	Other Provinces	Elsewhere*	TOTAL
Toronto	63.5	17.5	15.6	3.4	100.0
Queen's	51.3	15.6	25.9	7.2	100.0
Western	62.4	18.0	11.8	7.8	100.0
Total	60.7	17.2	17.2	4.9	100.0

*Includes dead or no address.

TABLE E34

ORIGIN OF MEDICAL STUDENTS IN ONTARIO UNIVERSITIES DURING ACADEMIC YEAR 1948-49

Students From	OTTAWA		QUEEN'S		TORONTO		WESTERN		TOTAL All Schools
	No.	%	No.	%	No.	%	No.	%	
Ontario	183	62.1	248	76.3	891	92.4	235	89.0	1,557
Maritime Prov. *	41	13.9	4	1.2	6	0.6	2	0.8	53
Quebec	31	10.5	16	4.9	0	0	2	0.8	49
Prairie Prov.	21	7.1	27	8.3	25	2.6	14	5.3	87
British Columbia	12	4.1	25	7.7	31	3.2	11	4.1	79
United States	6	2.0	5	1.6	1	0.1	0	0	12
Other Countries	1	0.3	0	0	10	1.1	0	0	11
Total from all sources	295	100.0	325	100.0	964	100.0	264	100.0	1,848

*Including Newfoundland.

students in each year (Table E35). This would suggest that the loss of Ontario graduates to other provinces will decline in the future, as the number of students from these provinces declines.

The Cost of Medical Education

Taking the University of Toronto by way of example, the annual cost per student to the medical school was estimated to be about \$1,300 in 1950. This represents a 62.5 per cent increase over the estimated cost in 1940. If the cost to the university

of medical research projects is included, and these are essentially complementary to medical education, the figure would be closer to \$1,400 per student per annum. Tuition fees in this school have increased from \$300 to \$450 per year during this same 10-year period.

Estimates on the basis of a national average in 1950 show a cost per student in excess of \$1,600. Tuition fees amount roughly to one quarter of the actual cost. The remainder has to be made up either from government grant or from trust funds.

TABLE E35

PERCENTAGE DISTRIBUTION OF MEDICAL STUDENTS BY YEAR OF TRAINING AND SOURCE, 1948-49

Students From	1st Year	2nd Year	3rd Year	4th Year	5th Year	6th Year	TOTAL	
							No.	%
Ontario	88.1	85.3	86.8	83.1	80.0	80.8	1,557	84.2
Maritime Prov. *	0.9	1.9	2.3	3.1	5.5	3.7	53	2.9
Quebec	4.2	3.8	2.0	2.0	1.9	2.1	49	2.6
Prairie Prov.	2.6	4.4	3.6	4.7	6.8	6.9	87	4.7
British Columbia	2.9	2.8	4.3	5.5	4.6	6.1	79	4.3
United States	1.3	1.2	0.2	0.8	0.3	0	12	0.7
Other Countries	0	0.6	0.8	0.8	0.9	0.4	11	0.6
Total	100.0	100.0	100.0	100.0	100.0	100.0	-	100.0
Number	311	319	394	254	325	245	1,848	-

*Including Newfoundland.

The Survey Committee studied the costs of medical education from the standpoint of the trainee, the public, and the medical school. The report on "Financial Implications of Training Men and Women to Undertake Responsibility for National Health and Welfare" by Dr. G. E. Hall, president of the University of Western Ontario, was considered at some length.

Dr. Hall pointed out in his brief to the Department of National Health and Welfare that although the university medical schools of Canada did stretch their teaching facilities to capacity in order to accommodate veterans of the last war, they could not have done so without financial assistance from the Department of Veterans' Affairs on a per student basis.

Dr. Hall went on to say that although the costs of university education, including medical, dental, nursing, etc., are lower in Canada than in the United States, the need of Canadian universities is proportionately greater, since endowment funds and gifts by benefactors to universities are much less in this country. He said that if universities are to discharge their responsibilities in training young men and women for the broad fields of health and welfare, they need both capital and annual maintenance grants.

The committee is of the opinion that to meet the need, special grants to medical schools will be necessary in the future to permit the training of the required number of qualified physicians. This assistance might be in the form of a subsidy to the medical school per student.

The committee also felt that consideration should be given to the suggestion that governments be asked to support medical schools to the extent of providing necessary funds to meet capital costs involved in providing essential facilities.

Postgraduate Education

The Ontario Medical Association in collaboration with university medical authorities, are extending their efforts to organize and integrate specialized courses of instruction in specific and general topics for the private practitioner and specialist. These courses are meeting with increasing success and will, as extended, meet specific requirements in the continuing education of the practising physician.

The Survey Committee considered the facilities and arrangements for postgraduate medical education which have been developed, and felt that everything possible should be done to maintain and extend them.

There is a strong body of opinion that a postgraduate school is needed in Ontario offering short courses of instruction to practising physicians,

and a stimulation of ward rounds in hospitals, even to the extent of having visiting physicians from the postgraduate school make rounds regularly with the local staff. The desirability of such a program is recognized by medical teachers, since it would round out the present postgraduate educational programs of the universities and the Ontario Medical Association.

Reference has been made to specific shortages in certain specialist fields. The committee feels that this need may reflect not only the wartime decline in teaching, but the prevailing low remuneration of certain of these groups, particularly psychiatrists.

Government assistance to medical schools will not alone solve this problem. In the specific cases cited it is more especially a matter of more adequate remuneration following training.

Association of Physicians with Hospitals

As of December 31, 1948, there were 4,595 physicians in active practice in Ontario. This is a ratio of one doctor to 926 persons. Of this number, 3,709 were in private practice either as general practitioners or as specialists.

In considering the hospital affiliations of these physicians, the appointments can be divided into two groups--those with regular staff appointments under which the physician has the opportunity to work under supervision in the out-patient department and wards of hospitals; and the private patient privilege, which affords the physician an opportunity to treat his own private patients in the hospital.

In New York City it was found that of the total number of physicians in the city, approximately 15,000 were engaged in the practice of medicine*. Approximately 2,700 practising physicians had no hospital connection of any type, and upwards of 4,000 practising physicians had no chance to work under guidance or instruction in either wards or out-patient departments. This meant that a large segment of the population was relying on 2,700 physicians with "no hospital affiliation of any sort, nor any apparent opportunity to further their medical education". It is estimated that the number of individuals thus affected would exceed 1,000,000.

A review of the schedules of information obtained by the Survey Committee from every public general hospital in Ontario was made, and it was found that 1,821 physicians in general practice were listed as having a hospital appointment of some sort. This is 78.4 per cent of the total number of general practitioners recorded in the survey. Similarly, it was found that there were 1,056 specialists in private practice with a hospital appointment. This

*Hospital Council of Greater New York, *Eleventh Annual Report, 1948-49.*

is equivalent to 76.2 per cent of the number of specialists in private practice tabulated in the survey. These figures suggest that there are a large number of physicians with no hospital connection of any sort.

Since the out-patient departments and public wards of the public general hospital are considered the best places for furthering a physician's education, a careful review of the ratio of staff appointments to beds in various hospitals should be made with a view to creating additional appointments to provide further educational opportunities for physicians who now have no hospital affiliation.

Hospital Development in Relation to Physician's Location

Many factors influence the distribution and movement of physicians. Physicians are at-

tracted within any area to those centres of population which are generously supplied with hospital facilities. Studies in the United States have shown that hospital facilities serve not only to attract, but to retain physicians.

The committee accepted as a working principle that a hospital or related facilities of some sort should be available to every physician. For rural areas these facilities might consist of a small hospital or health centre within the immediate locality but functionally tied to hospital centres at district or regional levels.

Physicians in all location should have access, directly or indirectly, to the physical facilities of a complete hospital system. They should be able to enjoy the advantages of consultation with other physicians, either through arrangements for conferences at the local hospital or through contacts with specialists at the main hospital centres.

CHAPTER VII

ESTIMATES OF FUTURE NEEDS AND SUPPLY OF PHYSICIANS

It is difficult to forecast the demand for physicians because it is impossible to estimate in advance the progress which will continue to take place in the practice of medicine. One thing is clear--Ontario now occupies a relatively favorable position in medical manpower. Certainly there is no evidence of any serious deficiency now except in certain special fields. It is, however, true that overall population-physician ratios are not adequate measures of the demand or supply of physicians. A satisfactory assessment requires close study of local needs and to this fact attention has been directed elsewhere in the report.

Estimates of Future Medical Manpower Needs

An estimate was made of the requirements of the province for physicians in 1951 and 1961, based on the population-physician ratios found by the Survey and the estimated population for 1951 and 1961 (Table E36).

The need for physicians depends to a large degree on the growth of Ontario's population and the expansion of health services in the province. The anticipated growth in population alone will create a new demand for medical service. Other needs now evident are those in specific specialty fields to which attention has also been directed. Expanding needs in public health and in industrial medicine are important considerations.

When the figures in Table E34 are compared with the estimates which follow the medical manpower position appears to worsen by 1951 but to improve slightly by 1961. If in the future a greater proportion of Ontario's graduates remain in Ontario, the position will be improved.

In the event of a war emergency the need for physicians would be sharply increased due to the demand for medical officers by the armed forces. In World War II the overall ratio of medical officers to personnel was in the range 3.5 to 4.5 per 1,000, or one medical officer for every 250 to 300 men. The withdrawal of doctors on this basis to serve any sizable force would quickly aggravate any present shortages.

Medical manpower needs should be reviewed periodically to provide a running assessment of requirements and to facilitate medical planning.

Estimates of Future Supply of Physicians

The future supply of physicians depends upon the following factors:

- (a) the output of the four Ontario medical schools.
- (b) the intensity of the withdrawal from On-

TABLE E36

PHYSICIANS IN ACTIVE CIVILIAN PRACTICE BASED ON CURRENT POPULATION- PHYSICIAN RATIOS 1951 AND 1961

TYPE OF PRACTICE	Physicians in Active Civilian Practice December 31, 1948		Physicians Required, Based on Survey Rates	
	Number	Ratio	1951	1961
General practice	2, 323	1, 832	2, 529	2, 779
Specialist private practice	1, 386	3, 070	1, 509	1, 658
Hospital	359	11, 900	391	429
Public health	145	29, 300	158	174
Industrial medicine	63	67, 000	69	75
Medical research	60	71, 000	65	72
Medical teaching	58	73, 000	63	70
Insurance	23	185, 000	25	28
Workmen's Compensation Board	22	193, 000	24	26
Other government service	77	55, 000	84	92
Medical administration	62	69, 000	67	74
Other and unspecified	17	250, 000	19	20
TOTAL	4, 595	926	5, 003	5, 497

tario of graduates from Ontario medical schools.

- (c) The repatriation of foreign-born students originally trained in Canada or Ontario.
- (d) the immigration of trained physicians to Ontario from other provinces and countries.

Some comments on these four factors have been made in earlier chapters of this section of the Survey report.

An attempt was made to estimate the number of physicians who in 1951 and 1961 will be engaged in active civilian practice or who, although doing administration, research, teaching or other work, might be available for practice, if required.

These estimates are useful only as a basis for planning if their nature is recognized. They are based on specified assumptions. Other sets of assumptions might have been chosen and illustrations of some alternative possibilities are suggested later in this discussion. Three separate estimates were prepared, as follows:

Estimate A

This estimate was based on the annual number of new registrations with the College of Physicians and Surgeons of Ontario. These were adjusted for migration of registrants from Ontario medical schools and registrants from outside Ontario, the anticipated output from the Ontario medical schools, deaths and retirements.

During the ten year period 1939 to 1948, the average annual number of new registrations was 243. It was assumed that this rate of new registrations would continue through 1950 and it was estimated that the average annual number of new registrations after 1951, including the new Ottawa school, would be 284.

The assumption that the distribution of the graduates of the Ottawa medical school will be

similar to that of the other three schools may tend to place the estimates slightly higher than they should be since the data on sources of medical students suggest that a smaller proportion of the graduates of Ottawa medical school is likely to remain in Ontario. On the other hand, there is evidence (Table E35) that a greater proportion of the graduates of Ontario medical schools may, in the future, remain in Ontario.

From an examination of the new registrations with the College of Physicians and Surgeons in 1935, 1939, 1945 and 1948, it was found that 85 per cent of new registrants were graduates of Ontario medical schools and 15 per cent were graduates of medical schools outside the province. Of the graduates of Ontario medical schools who registered in Ontario, 75 per cent were practising in Ontario; whole of the graduates of medical schools outside Ontario who registered, 62 per cent were practising in Ontario.

On the basis of these data, it was assumed that 73 per cent of all new registrants would remain in or return to Ontario.

The average annual number of deaths among Ontario physicians was estimated from the experience over the period 1934 - 1948 at 85 deaths.

It was assumed that the proportion of re-physicians on December 31, 1948, would remain unchanged at 6.8 per cent.

Estimate A is thus based on:

- (1) Annual number of new registrations - 284.
- (2) Registrants remaining Ontario - 73 per cent.
- (3) Annual number of deaths - 85.
- (4) Physicians retired - 6.8 per cent.

The calculations are as follows:

ITEM	Dec. 31, 1948 to June 1, 1951	June 1, 1951 to June 1, 1961
Physicians in Ontario at beginning of period	5,672	5,907
Estimated number of new registrants	613	2,840
Estimated number remaining in Ontario	447	2,073
Estimated number dying during the interval	212	968
Estimated physicians in Ontario at end of period	5,907	7,012
Estimated retired physicians at end of period	402	477
Estimated active physicians at end of period	5,505	6,535
Population-physician ratio at end of period	838	779
Estimated physicians in active civilian practice at end of period	4,785	5,680
Population-physician ratio at end of period	964	896

Estimate B

This estimate was based on the stated total possible number of graduates from Ontario medical schools with an adjustment for emigration of Ontario graduates, for immigration of graduates from schools outside Ontario, and for expected deaths and retirements.

The stated maximum number of graduates based on reports from the four medical schools is 300.

During the period 1935 - 1948, 60.7 per cent of the graduating students remained in or returned to Ontario.

On the basis of the study of new registrations with the College of Physicians and Surgeons in 1935, 1939, 1945 and 1949, it was estimated that

for every 100 graduates of Ontario medical schools, 8.9 graduates of other schools enter the province.

Estimate B is based on:

- (1) Maximum annual number of graduates from Ontario medical schools - 300.
- (2) Graduates of Ontario medical schools remaining in Ontario - 60.7 per cent.
- (3) Ratio of graduates from other schools to graduates of Ontario schools - 8.9 per cent.
- (4) Annual number of deaths - 85.
- (5) Physicians retired - 6.8 per cent.

The calculations are as follows:

ITEM	Dec. 31, 1948 to June 1, 1951	June 1, 1951 to June 1, 1961
Physicians in Ontario at beginning of period	5,672	6,068
Estimated number graduating from Ontario schools	875	3,000
Estimated number remaining in Ontario	531	1,821
Estimated number dying during the interval	212	989
Estimated number from other schools entering Ontario	77	264
Estimated number in Ontario at end of period	6,068	7,164
Estimated retired physicians at end of period	412	487
Estimated active physicians at end of period	5,656	6,677
Population-physician ratio at end of period	815	762
Estimated physicians in active civilian practice at end of period	4,916	5,804
Population-physician ratio at end of period	938	877

Estimate C

This is similar to Estimate B except that it is based on the actual average annual number of graduates of Ontario medical schools with an adjustment for the expected output of the new medical school at Ottawa, for immigration of graduates of schools outside Ontario, deaths and retirements.

The average annual output of graduates

from 1935 - 1948 was 88 per cent of the possible output (250). On this basis, the expected annual output, including the new school at Ottawa, is 264 graduates.

The basic assumptions in Estimate C are:

- (1) Annual number of graduates from Ontario medical schools - 264.

ITEM	Dec. 31, 1948 to June 1, 1951	June 1, 1951 to June 1, 1961
Physicians in Ontario at beginning of period	5,672	6,058
Estimated number graduating	860	2,640
Estimated number remaining in Ontario	522	1,602
Estimated number who died during the interval	212	971
Estimated number from other schools entering Ontario	76	232
Estimated physicians in Ontario at end of period	6,058	6,921
Estimated retired physicians at end of period	412	471
Estimated active physicians at end of period	5,646	6,450
Population-physician ratio at end of period	817	789
Estimated physicians in active civilian practice at end of period	4,908	5,607
Population-physician ratio at end of period	940	908

TABLE E37

SUMMARY OF ESTIMATES OF SUPPLY OF PHYSICIANS WITH COMPARATIVE CENSUS AND
SURVEY FIGURES

YEAR	Source of Data	Active Physicians		Physicians in Active Civilian Practice	
		Number	Population-Physician Ratio	Number	Population-Physician Ratio
1931	1931 Census	3,934	872	3,418*	1,004
1941	1941 Census	4,698	806	4,082*	928
1948	Dec. 31, 1948	5,289	805	4,595	926
1951	Estimate A	5,505	838	4,785	964
	Estimate B1	5,656	815	4,916	938
	Estimate B2	5,723	806	4,975	927
	Estimate B3	5,803	795	5,044	914
	Estimate B4	5,883	784	5,113	902
	Estimate C1	5,646	817	4,908	940
	Estimate C2	5,712	807	4,965	929
	Estimate C3	5,791	796	5,033	916
	Estimate C4	5,870	786	5,102	904
1961	Estimate A	6,535	779	5,680	896
	Estimate B1	6,677	762	5,804	877
	Estimate B2	6,974	730	6,062	840
	Estimate B3	7,302	697	6,347	802
	Estimate B4	7,631	667	6,633	768
	Estimate C1	6,450	789	5,607	908
	Estimate C2	6,718	758	5,839	872
	Estimate C3	7,014	726	6,097	835
	Estimate C4	7,311	696	6,355	801

* Estimated from the proportion of all active physicians who were in active civilian practice on December 31, 1948.

(2) Ontario graduates remaining in Ontario - 60.7 per cent.

(3) Ratio of graduates from other schools to graduates of Ontario schools - 8.9 per cent.

(4) Annual number of deaths - 85.

(5) Physicians retired - 6.8 per cent.

The calculations are at the bottom of the preceding page.

Some Alternative Estimates

Estimates B and C are based upon the assumption that the same proportion of the graduates of Ontario medical schools will remain in Ontario as in the past. There is some evidence that this proportion may increase. If we assume that 70 per cent, 80 per cent or 90 per cent of the graduates of Ontario medical schools remain in Ontario instead of 60 per cent, the estimated number of active physicians in 1951 and in 1961 would be much greater than

in Estimates B or C. Estimates on this basis are incorporated in a summary of estimates in Table E37. The number 1, 2, 3, 4, after the letters B and C signify the proportion (60.7, 70, 80, and 90 per cent respectively) of graduates of Ontario medical schools assumed to remain in Ontario.

These estimates assume that the increase in the number of Ontario graduates who remain in Ontario will not affect the number of physicians who enter Ontario from other provinces and from foreign countries, though it is to be expected that it would. They also assume that the proportion of retired physicians will remain at 6.8 per cent, which is very unlikely.

These estimates show that a great change in the medical manpower position in Ontario could be effected if a greater proportion of the output of Ontario's medical schools were retained in Ontario.

None of these estimates is more than a prediction as to what we might expect on certain specific assumptions.

**REPORT OF THE ONTARIO
HEALTH SURVEY COMMITTEE**

SECTION F

PROVISION OF NURSING CARE

(Pages 263 to 300)

F. PROVISION OF NURSING CARE

CONTENTS

	Page
Summary	266
Recommendations	267
Chapter I: Inventory of Registered Nurses in Ontario	268
Chapter II: Education in Nursing	277
Chapter III: Institutional Nursing Care	290
Chapter IV: Private Practice of Nursing	293
Chapter V: Public Health Nursing	298

PROVISION OF NURSING CARE

SUMMARY

There were 18,100 graduate nurses registered with the Division of Nurses Registration, Ontario Department of Health, at Dec. 31, 1948, the basic date of this survey. This, however, did not represent the number of nurses available for duty in Ontario because it included several hundred nonresidents of the province and an even larger number no longer active in the practice of their profession.

Before any adequate appreciation of the supply of nurses in Ontario can be formed, a detailed study has to be made along the lines indicated in Table F1. This was done by the Survey Committee for the year 1949 because such occupational data were not obtainable for previous years. The total number of nurses who registered in Ontario in 1949 was 19,875. Table F1 shows details on 17,088 of these--10,479 employed full time in the nursing field, 786 part time, and 5,823 not employed in nursing proper. Of the 19,875 registered in Ontario, 2,475 were not resident in the province.

One estimate of the shortage of nurses, as of Dec. 31, 1948, in the institutional field alone, places it close to 3,400. Indications are that this may be expected to increase as more hospital beds are added to the province's complement, unless steps are taken to attract more young women to the profession.

Table F12 demonstrates another factor affecting the supply of nurses between the years 1950 and 1958--a notable reduction in the number of girls entering their 19th year, the average age at which the majority begin the study of nursing. During this eight-year period, there will be fewer girls in this age group than has been the case in more than two decades. This can undoubtedly be attributed to the major financial depression of the 1930's which, in Ontario, as elsewhere, greatly restricted the number of marriages and births a generation ago. Nurses themselves believe that an improvement in the living accommodation and teaching facilities of both hospital and university schools of nursing will help to attract substantially greater numbers of students.

The greatest single cause of graduates' leaving the practice of nursing is marriage. Table F4 shows that of 5,162 who reported to be employed full time in fields other than nursing, 86.5 per cent listed their occupation as housewife. The remaining 696 were employed in industry, business, teaching, etc.

More than 90 per cent of the nurses graduating in Ontario in 1949 were educated in the 53

schools operated by public general hospitals; and yet these hospitals, supplying graduates to some 30 institutions other than general hospitals, to industry, public health and private nursing, have not received sufficient financial assistance in building and maintaining badly needed residences and classrooms. Patient care by student nurses, under supervision, in some measure compensates hospitals for the day-to-day expense of providing room, board and instruction; but the hospitals are unable to offer their students as effective instruction and as comfortable accommodation as they should like to provide. Few hospitals feel able to make sufficient provision for student recreation, and most students receive little or no financial return for the responsibilities of patient care entrusted to them.

Improvements in the nursing education program are recommended in this section of the Survey report, with particular emphasis upon government-financed expansion and modernization of hospital school accommodation, increases in the salaries of paid nursing teachers, and the provision of bursaries to assist promising students who would not otherwise be able to undertake the nursing course. Another major recommendation involves reorganization of the hospital school curriculum in such a way as to concentrate formal instruction in the first two years and provision of a third year of supervised internship with pay. These are gone into in detail in Chapter II.

A factor which aggravates the fundamental shortage of graduate nurses is the employment of fully qualified personnel on tasks which do not require skill beyond the reach of nonprofessional trained nursing assistants. One way to increase the effectiveness of the professional nursing staff is to increase the numbers and qualifications of certified nursing assistants, both male and female. The Survey Committee recommends expansion of existing programs for training such assistants.

Principal emphasis in this section of the Survey report is upon education in nursing, because this appears to hold the key to both the quality and quantity of future nursing personnel. Hospital and university schools have contributed more to the health of Ontario people than is sometimes realized. The professional nurse--and the certified nursing assistant, to an increasing degree--is an important member of the health team. Without an adequate staff of well trained and conscientious nurses, no hospital, however well built and equipped, can be more than idle bricks and mortar. The need today is to maintain the high standard set for nurses graduating from Ontario schools and, at the same time, to increase their numbers substantially.

PROVISION OF NURSING CARE

RECOMMENDATIONS

It is recommended that, -

- 1 - Capital grants be made available to hospitals for the construction of approved schools of nursing to enable them to establish, replace, enlarge, or modernize nurses' residences and classrooms, and that operating grants be made available for the maintenance thereof. (Chapter II of this Section, and Chapter IV, Section A, Vol. I, Report of the Ontario Health Survey Committee).
- 2 - Additional capital and operating grants be made available to the university schools of nursing for the extension of both undergraduate and graduate work (Chapter II).
- 3 - Additional bursaries be made available to eligible students in hospital and university schools of nursing (Chapter II).
- 4 - A change in the curriculum of hospital schools of nursing be initiated within the three-year framework by covering the basic course of instruction in two consecutive years and requiring a third year of nursing in the hospital under supervision and with nominal salary, the final provincial registration examination to be written at the end of the second year (Chapter II).
- 5 - Instructors in schools of nursing have at least one full year of bedside nursing experience, including nursing in the home (Chapter II).
- 6 - Schools of nursing arrange for additional teaching in psychiatry, public health, and home nursing (Chapter II).
- 7 - Special postgraduate courses be added by university schools of nursing to provide instruction in paediatrics, psychiatry, neurosurgery, and communicable diseases (Chapter II).
- 8 - Local health departments use as a guide the standard of one public health nurse for every 4,000 persons where service does not include bedside care; one nurse for every 2,500 persons where bedside care is included; and at least one supervisor for every eight members of the public health nursing staff (Chapter V).
- 9 - The present program for training certified nursing assistants be expanded, with the location of training centres on a regional basis (Chapter II).
- 10 - A curriculum be prepared and a training course set up for male nursing assistants, and that provision be made for their certification (Chapter II).

CHAPTER I

INVENTORY OF REGISTERED NURSES IN ONTARIO

Table F1 shows the place of residence of all 19,875 graduate nurses who registered with the Division of Nurses Registration, Ontario Department of Health, in 1949. More than half (53.1 per cent) of the 2,475 registrants who were not residents of Ontario at that time gave a United States address. Among the other provinces, Quebec had the greatest number of Ontario nurses (353), followed by British Columbia (290). There were 24 in Great Britain and 47 in all other countries.

This same table (F1) indicates that there were only 22 graduate male nurses in Ontario, and only 17 of them were working full time at nursing. It is known, too, that 9,243 women graduates were employed full time in their profession and 720 were employed part time. This leaves 5,159 who definitely stated that they were not employed in the nursing field, and a further 2,256 who failed to indicate what they were doing. Some of the latter may be found engaged in nursing full or part time.

The difficulty in getting accurate and complete data on nursing employment made it necessary to be satisfied with occupational details on 87 per cent of those resident in Ontario and 79.5 per cent of those resident elsewhere. Such information was not sought by the Nurses Registration Division prior to 1948, at which time a questionnaire was added to the renewal application form to be used the following year. Of the 17,400 graduate nurses registered in Ontario and resident in the province, 2,256 failed to answer the questions asked on this form and on a subsequent follow-up postcard. No postcard was sent to the 531 nonresidents who registered in Ontario and failed to supply personal background on their renewal application.

Table F2 pursues the study of the 15,144

registered nurses who reported their occupations in Ontario, providing a breakdown of their numbers by county. The same county breakdown is offered in Table F3, showing the type of nursing done by 9,145 of the 9,260 employed full time in the practice of their profession in the province.

Table F4 and F5 provide an analysis of those Ontario-resident registered nurses engaged full and part time in fields other than nursing. It is clear from those two tables that marriage is by far the biggest single competitor the profession has for the services of its graduates. Of the 5,162 Ontario-resident registered nurses employed full time in fields other than nursing, 86.5 per cent gave their occupation as housewife; and of 722 employed part time outside nursing, 75.9 per cent said they were housewives part time.

Tables F6 and F7 constitute an attempt to analyse the province's active professional nursing force of 9,260 in terms of age, field of nursing and marital status. As explained in footnotes to the tables, there was no record kept of registered nurses' ages; therefore the age column has to be an approximation only. It is based upon the year of initial registration and upon the assumption that the average age of graduation is 22 years. This should be reasonably accurate so far as nurses registered later than 1930 are concerned; but in the eight years prior to this, and immediately following the passing of the Nurses' Registration Act in 1922, initial registrations came from nurses of all ages.

It is interesting to note from Table F7 how rapidly the number of single nurses declines between the ages of 22 and 29. Beyond age 30, the number of single nurses remains fairly constant.

TABLE F1

NURSES REGISTERED WITH DIVISION OF NURSES REGISTRATION, ONTARIO DEPARTMENT OF HEALTH, IN 1949,
BY PLACE OF RESIDENCE, EMPLOYMENT, AND SEX

RESIDENCE	Reported Employed Full Time in Nursing		Reported Not Employed in Nursing		Reported Employed Part Time in Nursing		Occupation Not Reported*	TOTAL
	Male	Female	Male	Female	Male	Female		
Province of Ontario	17	9,243	3	5,159	2	720	2,256	17,400
British Columbia	1	169		64		5	51	290
Alberta		53		31		4	11	99
Saskatchewan		42		45		1	21	109
Manitoba		40		26		2	14	82
Quebec		162		110		6	75	353
New Brunswick		26		17		2	9	54
Nova Scotia	1	25		26		1	14	67
Prince Edward Island		3		4			1	8
Newfoundland		4		4			5	13
N. W. T. and Yukon		10		3			1	14
United States	2	644	2	319		43	305	1,315
Great Britain		20		3			1	24
Other Countries		17		7			23	47
TOTAL	21	10,458	5	5,818	2	784	2,787	19,875**

*1949 was the first year in which provision was made on renewal application form for occupational data.

**1949 registrations exceeded 1948 by 1,775.

TABLE F2

NUMBER OF REGISTERED NURSES RESIDENT IN EACH COUNTY OF ONTARIO BY SEX AND
TYPE OF EMPLOYMENT*

RESIDENCE-COUNTY	TYPE OF EMPLOYMENT						TOTAL
	Reported Employed Full Time in Nursing		Reported Not Employed in Nursing		Reported Employed Part Time in Nursing		
	Male	Female	Male	Female	Male	Female	
Addington	-	1	-	6	-	-	7
Algoma	-	72	-	51	-	10	133
Brant	-	149	-	104	-	9	262
Bruce	-	69	-	69	-	7	145
Carleton	2	626	-	266	-	26	920
Cochrane	-	96	-	60	-	6	162
Dufferin	-	22	-	15	-	2	39
Dundas	-	8	-	27	-	3	38
Durham	-	38	-	53	-	6	97
Elgin	-	126	-	88	-	18	232
Essex	-	384	-	214	-	18	616
Frontenac	1	263	-	127	-	12	403
Glengarry	-	5	-	6	-	2	13
Grenville	-	14	-	20	-	2	36
Grey	-	85	-	85	-	11	181
Halimand	-	27	-	33	-	2	62
Haliburton	-	6	-	7	-	-	13
Halton	-	56	-	54	-	7	117
Hastings	1	114	-	104	-	20	239
Huron	-	58	-	68	-	5	131
Kenora & Patricia	-	29	-	18	-	3	50
Kent	1	148	-	109	-	17	275
Lambton	1	124	-	107	-	22	254
Lanark	1	83	-	42	-	10	136
Leeds	-	110	-	66	-	12	188
Lennox	-	6	-	12	-	2	20
Lincoln	-	151	1	87	-	7	246
Manitoulin	-	9	-	6	-	2	17
Middlesex	-	596	-	258	2	50	906
Muskoka	-	49	-	30	-	8	87
Nipissing	-	71	1	40	-	6	118
Norfolk	-	51	-	32	-	14	97
Northumberland	-	41	-	58	-	4	103
Ontario	2	121	-	106	-	18	247
Oxford	-	120	-	107	-	15	242
Parry Sound	-	26	-	14	-	3	43
Peel	-	43	-	48	-	3	94
Perth	1	118	-	93	-	16	228
Peterborough	-	111	-	72	-	18	201
Prescott	1	10	-	7	-	-	18
Prince Edward	-	18	-	28	-	2	48
Rainy River	-	14	-	10	-	3	27
Renfrew	1	83	-	78	-	15	177
Russell	-	4	-	6	-	1	11
Simcoe	-	195	-	136	-	16	347
Stormont	-	68	-	38	-	4	110
Sudbury	1	120	-	91	-	12	224
Thunder Bay	1	134	-	73	-	18	226

*This table does not include the 2,475 nurses registered in Ontario but not resident in the province in 1949, nor does it include the 2,256 resident registered nurses who fail to supply occupational details. This was the first year in which provision was made on renewal application forms for the inclusion of such data.

TABLE F2 (Cont'd)

NUMBER OF REGISTERED NURSES RESIDENT IN EACH COUNTY OF ONTARIO BY SEX AND
TYPE OF EMPLOYMENT*

RESIDENCE-COUNTY	TYPE OF EMPLOYMENT						TOTAL
	Reported Employed Full Time in Nursing		Reported Not Employed in Nursing		Reported Employed Part Time in Nursing		
	Male	Female	Male	Female	Male	Female	
Timiskaming	-	59	-	50	-	6	115
Victoria	-	35	-	29	-	6	70
Waterloo	-	268	1	152	-	22	443
Wellsand	-	209	-	169	-	23	401
Wellington	-	158	-	102	-	17	277
Wentworth	-	604	-	305	-	46	955
York	3	3,032	-	1,119	-	133	4,287
Not Stated	-	6	-	4	-	-	10
TOTAL	17	9,243	3	5,159	2	720	15,144

*This table does not include the 2,475 nurses registered in Ontario but not resident in the province in 1949, nor does it include the 2,256 resident registered nurses who fail to supply occupational details. This was the first year in which provision was made on renewal application forms for the inclusion of such data.

TABLE F3
NUMBER OF NURSES RESIDENT IN ONTARIO EMPLOYED FULL TIME IN SELECTED FIELDS OF NURSING BY COUNTY

RESIDENCE-COUNTY	FIELD OF NURSING						TOTAL
	Hospital or School	Private Duty	Public Health	Industry	Doctor's Office	Other	
Addington	1	-	-	-	-	-	1
Algonia	52	7	3	3	-	4	72
Brant	76	33	15	13	7	5	149
Bruce	52	5	8	-	2	2	69
Carleton	307	174	70	22	22	25	628
Cochrane	66	13	9	1	3	2	96
Dufferin	11	8	1	1	-	1	22
Dundas	8	-	-	-	-	-	8
Durham	27	3	4	2	-	-	38
Elgin	72	31	6	2	8	1	126
Essex	177	88	40	41	30	6	384
Frontenac	169	56	15	9	2	13	264
Glengarry	1	2	2	-	-	-	5
Grenville	8	3	-	1	2	-	14
Grey	54	18	5	1	4	2	85
Haldimand	15	7	2	1	3	-	27
Haliburton	4	1	1	-	-	-	6
Halton	30	10	7	5	2	1	56
Hastings	55	36	8	3	9	4	115
Huron	38	13	4	-	1	1	58
Kenora & Patricia	20	3	4	1	1	-	29
Kent	53	55	12	6	17	3	149
Lambton	59	33	7	12	5	8	125
Lanark	51	18	3	3	4	3	84
Leeds	66	26	7	4	1	3	110
Lennox	-	1	5	-	-	-	6
Lincoln	71	34	21	14	5	4	151
Manitoulin	5	2	1	-	1	-	9
Middlesex	394	122	38	8	14	15	596
Muskoka	38	4	3	1	-	1	49
Nipissing	40	19	5	1	4	1	71
Norfolk	33	8	1	2	5	1	51
Northumberland	25	3	6	-	3	4	41
Ontario	71	30	5	6	5	4	123
Oxford	83	15	14	2	2	3	120
Parry Sound	14	5	2	1	3	1	26
Peel	27	10	2	1	3	-	43

TABLE F3 (Cont'd)
NUMBER OF NURSES RESIDENT IN ONTARIO EMPLOYED FULL TIME IN SELECTED FIELDS OF NURSING BY COUNTY

RESIDENCE-COUNTY	FIELD OF NURSING							TOTAL
	Hospital or School	Private Duty	Public Health	Industry	Doctor's Office	Other	Not Stated	
Perth	59	34	8	3	7	6	2	119
Perthborough	54	24	9	8	11	4	1	111
Prescott	5	-	4	-	-	-	2	11
Prince Edward	11	3	4	-	-	-	-	18
Rainy River	11	-	-	-	1	1	1	14
Renfrew	52	20	4	3	2	-	3	84
Russell	4	-	-	-	-	-	-	4
Simcoe	111	58	18	2	3	2	1	195
Stormont	38	10	11	5	2	2	-	68
Sudbury	61	28	8	13	5	5	1	121
Thunder Bay	93	18	10	6	1	6	1	135
Timiskaming	40	5	6	1	6	-	1	59
Victoria	16	16	1	-	2	-	-	35
Waterloo	157	48	26	19	5	10	3	268
Welland	105	43	21	26	9	2	3	209
Wellington	89	42	13	4	5	2	3	158
Wentworth	306	155	57	35	25	15	11	604
York	1,562	852	342	105	67	74	33	3,035
Not Stated	6	-	-	-	-	-	-	6
TOTAL	5,053	2,252	878	396	319	247	115	9,260

TABLE F4

REGISTERED NURSES IN ONTARIO EMPLOYED FULL TIME IN FIELDS OTHER THAN NURSING AS OF DEC. 31, 1949
(By field of activity and marital status)

FIELD	MARITAL STATUS					TOTAL
	Single	Married	Widowed	Divorced	Not Stated	
Housewife	89	4,315	41	3	18	4,446
Industry	5	5	-	-	-	10
Teaching	8	2	-	-	2	12
Business	59	26	5	1	4	95
Postgraduate	57	2	2	-	12	73
Other	191	19	6	1	26	243
Not Stated	127	107	11	4	14	263
TOTAL	536	4,476	65	9	76	5,162

TABLE F5

REGISTERED NURSES IN ONTARIO EMPLOYED PART TIME IN FIELDS OTHER THAN NURSING AS OF DEC. 31, 1949

FIELD	MARITAL STATUS					TOTAL
	Single	Married	Widowed	Divorced	Not Stated	
Housewife	20	519	6	-	3	548
Industry	-	-	-	-	-	-
Teaching	2	1	-	-	-	3
Business	3	-	-	-	-	3
Postgraduate	2	-	-	-	-	2
Other	3	2	-	-	1	6
Not Stated	46	100	8	-	6	160
TOTAL	76	622	14	-	10	722

TABLE F6

NUMBER OF REGISTERED NURSES RESIDENT IN ONTARIO
REPORTED EMPLOYED FULL TIME IN SELECTED FIELDS OF NURSING, BY AGE, 1949

YEAR OF INITIAL REGISTRA- TION	AGE* EQUIVALENT	FIELD OF NURSING						TOTAL
		Hospital or School	Private Duty	Public Health	Industry	Doctor's Office	Not Stated	
1949	22	745	173	43	9	21	30	1,021
1948	23	633	181	48	22	30	17	931
1947	24	521	179	71	25	34	23	853
1946	25	352	97	53	17	24	14	557
1945	26	271	81	46	21	18	14	451
1944	27	207	84	47	14	18	14	384
1943	28	188	86	47	16	16	17	370
1942	29	157	59	42	21	18	7	304
1941	30	137	52	35	20	13	16	273
1940	31	103	38	32	14	9	20	216
1939	32	120	34	22	10	9	13	208
1938	33	109	56	28	14	8	12	227
1937	34	88	39	20	8	7	10	172
1936	35	79	29	16	17	9	9	159
1935	36	85	53	15	14	8	12	187
1934	37	97	55	17	14	14	10	207
1933	38	117	53	24	11	9	10	224
1932	39	84	85	18	12	5	10	214
1931	40	115	59	20	8	6	11	219
1930	41	110	68	17	11	6	10	222
1929	42	85	61	17	12	4	8	187
1928	43	83	59	21	14	3	4	184
1927	44	75	48	13	12	5	7	160
1926	45	51	42	15	12	5	3	128
1925	46	50	55	15	8	4	9	141
1924	47	183	220	83	21	9	21	537
1923	48	208	206	54	18	7	31	524
	and over							
TOTAL		5,053	2,252	879	395	319	362	9,260

*Owing to the absence of records showing nurses' ages at the time of their initial registration, it had to be assumed that their average age then was 22 years. This is reasonable except in the case of those registering within the first eight years after registration machinery was set up in 1922. Between 1923 and 1931 the records were left open to register graduate nurses of all ages in practice before that time. Age groups in this table above 40 years are therefore only approximate.

TABLE F7

NUMBER OF REGISTERED NURSES RESIDENT IN ONTARIO
REPORTED EMPLOYED FULL TIME IN NURSING FIELD, BY AGE AND MARITAL STATUS

YEAR OF REGISTRA- TION	AGE* EQUIVALENT	MARITAL STATUS					TOTAL
		Single	Married	Widowed	Divorced	Not Stated	
1949	22	434	122	-	-	465	1,021
1948	23	792	118	6	3	12	931
1947	24	650	114	11	5	43	853
1946	25	418	112	3	2	22	557
1945	26	344	87	4	3	13	451
1944	27	277	74	7	6	20	384
1943	28	268	71	11	4	16	370
1942	29	224	56	8	1	15	304
1941	30	188	53	13	2	17	273
1940	31	162	36	6	3	9	216
1939	32	145	37	11	4	11	208
1938	33	167	37	10	1	12	227
1937	34	131	24	1	3	13	172
1936	35	110	38	4	2	5	159
1935	36	145	31	3	-	8	187
1934	37	151	37	8	3	8	207
1933	38	168	32	10	3	11	224
1932	39	169	34	2	-	9	214
1931	40	160	36	9	2	12	219
1930	41	169	33	7	3	10	222
1929	42	136	32	4	2	13	187
1928	43	130	30	9	2	13	184
1927	44	113	24	12	1	10	160
1926	45	93	14	9	1	11	128
1925	46	111	14	8	1	7	141
1924	47	423	54	25	6	29	537
1923	48	435	32	23	1	33	524
	and over						
TOTAL		6,713	1,412	224	64	847	9,260

*Owing to the absence of records showing nurses' ages at the time of their initial registration, it had to be assumed that their average age then was 22 years. This is reasonable except in the case of those registering within the first eight years after registration machinery was set up in 1922. Between 1923 and 1931 the records were left open to register graduate nurses of all ages in practice before that time. Age groups in this table above 40 years are therefore only approximate.

CHAPTER II

EDUCATION IN NURSING

The three chapters which follow--Institutional, Private Practice, and Public Health Nursing--are substantially in agreement on the basic needs of the nursing service in Ontario, and on the most effective means of attracting greater numbers of students, training them, and keeping them active in the nursing profession.

Since 53 of the province's 63 schools of nursing are owned and operated by public general hospitals, and since these, plus the six schools in Ontario Mental Hospitals, produced 97.7 per cent of graduate nurses in 1948, this is the most important type of school under consideration. The nursing profession generally seems in agreement that these schools are handicapped by inadequate financing, too little and uncomfortable residence accommodation, overworked staff, and a necessity on the part of hospitals to require too high a proportion of students' time on ward duties.

History of Nursing Education in Ontario

Following the establishment of Ontario's first training school at St. Catharines in 1873, the growth of training centres was rapid. This was clearly because hospitals were quick to see the need for schools and the advantages, financial and otherwise, in setting up a school to maintain their nursing service. These early schools played a valuable and indispensable part in community welfare, but the value of the small school as an educational institution was limited by a lack of variety in types of patient and insufficient graduate staff to teach and supervise.

Until 1922 there was neither inspection nor control in the institutions which initiated the apprenticeship type of training. At that time the Nurses Registration Act came into effect in Ontario. An initial survey of training centres was then made to standardize the training and correct the many abuses which the nurse in training had suffered.

This first survey in 1922 revealed that 19 per cent of hospital training schools were being operated with only one graduate nurse, who acted as business head, supervised operating rooms, laundry, and housekeeping in addition to being the instructor. Twenty-nine per cent of the training schools were in hospitals of fewer than 25 beds.

Nurses in training had no health supervision. Incidence of tuberculosis was high, for housing was bad, and there was no control of hours of duty. The criterion of a good nurse was the number of hours she could work at one time without resting. Planned courses of instruction were not possible, for the busy

country doctor had little time to give to teaching. Because the type of nursing was chiefly surgical, an affiliation with other hospitals became essential to round out the nurse's experience. Such affiliations were not sought, and when attempted, became a burden. The young nurse in training was frequently sent to country homes to nurse on 24-hour duty, and revenue from this service was paid directly into hospital funds.

From 1910 to 1920 there was a move to donate large Victorian dwellings in various communities for use as hospitals. Even as a gift, some of the buildings became a burden in the course of time. There was a lack of fire protection and elevators, and upkeep was expensive. Nurses and domestic help were in many cases tucked away in attics and their comfort and welfare neglected. The superintendent frequently had her bed-sitting room for an office.

When a minimum staff of three graduate nurses became a requirement in 1924, many boards of trustees stated that they could not afford more than one graduate nurse.

In 1931 a survey conducted by the Canadian Nurses' Association brought about an attempt to classify hospitals with training schools. They were grouped as follows:

Approved	33
Approval withheld for further reports .	19
Not approved	29
Recommended to discontinue	17

Since 1931 the number of schools of nursing in public general hospitals has declined from 98 to 53, a radical drop closely related to the difficulty of keeping school standards up to provincial requirements.

Shortage of candidates for training has also contributed to the closing of many of the smaller, less attractive schools; and this has not been altogether a bad thing, as their teaching capacities are limited by the smaller variety of cases treated. Since 1931 there has been a notable preference on the part of candidates for approved hospital schools.

Following the declaration of World War II, hospital superintendents were asked to further increase the enrollment of students in order that the hospitals would not face a shortage in the event of national demands.

In 1943, due to certain changes in the secondary school curriculum, it was necessary to

TABLE F8
SUMMARY OF ENROLLMENT IN ONTARIO SCHOOLS OF NURSING
(December 31, 1948)

No. of Schools	Operating Authority	No. of Students	Percentage of Graduates, 1948
53	Boards of Trustees of Public General Hospitals	4,438)	97.7
6	Ontario Department of Health in Ontario Mental Hospitals	102)	
3	Universities	193	
1	Canadian Nurses' Association financed by Canadian Red Cross Society	36	(Demonstration School at Windsor opened Jan. 19, 1948)
63		4,769	100.0

TABLE F9
CONCENTRATION OF NURSING STUDENTS BY HOSPITAL SIZE, 1948

Number of Beds	Percentage of Total Student Enrollment
More than 200	61.7
151 to 200	11.6
101 to 150	12.9
51 to 100	11.3
Fewer than 50	0.3
Ontario Mental Hospitals	2.2
	100.0

revise the regulations for admission to training schools. Accordingly, the requirements became:

1. The age of the student to be not less than 18 years on admission.
2. The secondary school graduation diploma, or its equivalent, in place of the three years of high school formerly required.

These changes were in keeping with those of other countries and provinces, and with university admission requirements.

Student Nurse Residence Accommodation

At no time in the history of this province's schools of nursing has residence accommodation been adequate. There was a spurt of activity in the late 1920's, and some new houses were built, others improve; but residence construction has failed to keep pace with the rate of increase of hospital beds and the increasing numbers of patients. In 1946, major schools of nursing reported that their enrollment was limited by lack of student residences.

In the five years prior to 1948, five residences have been built and four additions to existing buildings have been made. A number of centres have increased their accommodation through the appropriation of large houses or buildings formerly used for military purposes. Even so, in 1948 there were 34 dormitories, with the number of beds in each ranging from three to 17, and many double-decker beds.

As reported on page 48 of the Hospital Facilities and Services section of this Survey (Volume I), hospital administrators said that nurse residence accommodation was inadequate in 66 out of 125 hospitals; and student accommodation was regarded as inadequate in 26 out of 53 hospital schools of nursing.

Dining room accommodation in many hospitals is limited and unattractive. About two-thirds of the dining rooms are located in basements of hospitals in proximity to the kitchens or furnace rooms.

Classrooms

Teaching facilities in schools of nursing are seriously inadequate, and only 17 teaching units can be classified as acceptable. It is not uncommon to find the same classroom space being used for schools which have doubled their enrollment. Nearly three quarters of the classroom accommodation is located in the basements of residences, and little provision is made for laboratory study. Only 23 per cent of the teaching units have a dietetic laboratory, and 34 per cent have badly equipped laboratories. There are few good libraries. Office accommodation for instructors is poor. In approximately 15 per cent of the schools the instructor has no office at all. There is little evidence of planning for suitable classrooms except in newly built residences.

Organization and Conduct of Schools

In the majority of schools today the director of nursing fulfils the dual role of director of nursing service and school principal. Because the position is untenable, there is a trend to appoint associate directors, one responsible for nursing education and another for nursing service.

Hospitals now recognize the need for a separate financial statement for schools of nursing, and a few institutions are making an analysis of the cost of maintaining their schools. A complete study, however, will be impossible until research is done on the amount of service provided to hospitals by student nurses and the amount of instruction given by hospital nursing staffs to the school. In the early days of training schools, it was the custom to give students a small allowance of money to cover incidental expenses. This practice is still in effect today in most hospital schools in Ontario.

It has been pointed out that adequate supervision and instruction of students has been lacking since pioneer days. It is not uncommon today to find one supervisor or head nurse employed on a ward to cover a 24-hour period. This means that for two thirds of the time, with the exception of an occasional visit of another supervisor, students are working without sufficient supervision. Particularly is this the case on night duty. The provision of supervisors with special training for all major departments of hospitals is a goal in institutions today.

Hours of Duty

Through the years there has been continual emphasis on the reduction of hours of duty for nurses. In 1938 the Minister of Health for Ontario made a plea for better control of hours of duty. At that time, 50 per cent of the schools were exceeding the provincial requirement of 58 hours of duty each week for students. The year 1943 marked the beginning of the eight-hour day. Now, the range of reported day duty is from 44 to 57 hours per week, and night duty from 44 to 62½ hours, although classroom instruction may or may not be included in the hours stated above. The majority of schools provide for three weeks' vacation annually. Twenty-eight schools arrange an allowance of time for illness varying from seven to 21 days in a three-year period.

Health Program

The health program for students has developed satisfactorily. The withdrawal rate for students for reasons of health is estimated to be around two per cent. There is an increasing realization of the preventive work that should be done among student nurses, as well as a careful selection of students and a comprehensive health service.

Supervision of Schools

Inspection of schools of nursing is a responsibility of the Ontario Department of Health. The

TABLE F10

ENROLLMENT IN SCHOOLS OF NURSING AT DECEMBER 31, 1948

Size of Hospital	Location	Hospital	Bed Capacity	No. of Students
Over 200 beds	Toronto	General Hosp. (incl. Wellesley)	1,408	438
	Hamilton	General Hospital	932	292
	Toronto	St. Michael's Hospital	651	225
	Ottawa	Civic Hospital	642	244
	Toronto	Western Hospital	566	191
	London	Victoria Hospital	540	196
	Toronto	Hospital for Sick Children	432	112
	Kingston	General Hospital	391	153
	Hamilton	St. Joseph's Hospital	369	155
	Toronto	St. Joseph's Hospital	308	146
	Toronto	East General and Orthopaedic	281	146
	Kingston	Hotel Dieu Hospital	280	121
	London	St. Joseph's Hospital	244	141
	Brantford	General Hospital	243	92
	Windsor	Hotel Dieu Hospital	211	115
	Fort William	McKellar General Hospital	201	56
	Total			2,823
151 to 200 beds	Port Arthur	St. Joseph's Hospital	193	33
	Kitchener	Kitchener & Waterloo Hospital	183	75
	Port Arthur	General Hospital	182	42
	Windsor	Salvation Army Grace Hospital	180	128
	Oshawa	General Hospital	173	73
	Sudbury	St. Joseph's Hospital	173	46
	St. Catharines	General Hospital	165	59
	Chatham	General Hospital	158	72
	Total			528
101 to 150 beds	Toronto	Women's College Hospital	149	80
	Cornwall	Hotel Dieu Hospital	136	23
	Niagara Falls	General Hospital	134	35
	Belleville	General Hospital	131	45
	Peterborough	Civic Hospital	124	79
	Windsor	Metropolitan Hospital	123	36
	Brockville	General Hospital	121	51
	North Bay	St. Joseph's Hospital	121	40
	Kitchener	St. Mary's Hospital	120	52
	Sarnia	General Hospital	119	54
	Chatham	St. Joseph's Hospital	118	54
	Stratford	General Hospital	118	38
	Total			587
51 to 100 beds	Sault Ste. Marie	General Hospital	99	20
	Timmins	St. Mary's Hospital	98	37
	St. Thomas	Memorial Hospital	97	39
	Guelph	General Hospital	94	57
	Pembroke	General Hospital	90	29
	Guelph	St. Joseph's Hospital	89	32
	Owen Sound	General Hospital	89	37
	Peterborough	St. Joseph's Hospital	85	61
	Woodstock	General Hospital	83	30
	Orillia	Soldiers' Memorial Hospital	77	36
	Cornwall	General Hospital	71	35
	Renfrew	Victoria Hospital	69	13

TABLE F10 (Cont'd)

ENROLLMENT IN SCHOOLS OF NURSING AT DECEMBER 31, 1948

Size of Hospital	Location	Hospital	Bed Capacity	No. of Students
51 to 100 beds (cont'd)	Galt Collingwood Barrie Lindsay	General Hospital	67	19
		General and Marine Hospital	58	24
		Royal Victoria Hospital	55	29
		Ross Memorial Hospital	54	20
		Total		
Under 50 beds	Sault Ste. Marie	Plummer Memorial Hospital	47	18
Ontario Hospitals (mental)		Brockville	750	26
		Hamilton	1,065	12
		Kingston	945	22
		London	1,100	5
		New Toronto	1,100	11
		Whitby	1,500	26
		Total		
University Schools of Nursing	London Kingston Toronto Hamilton Ottawa	University of Western Ontario		100
		Queen's University		33
		University of Toronto		72
		McMaster University		37
		University of Ottawa		84
		Total		
SUMMARY General hospital schools Ontario (mental) hospital schools University schools Total number of students enrolled 4,474 102 326 4,902				

schools have brought about a gradual improvement in hours of duty, health services, maintenance of minimum requirements, and the development of teaching responsibilities of the nursing staff.

Registration examinations have done much to standardize courses and raise the level of instruction.

The "Curriculum and Information for Schools of Nursing in Ontario", issued by the Nurses Registration Division of Ontario in 1949, is intended to provide added stimulus toward the improvement of courses of study. The outline is brief, and provision is made for flexibility in the program of each school. The requirements are minimal, for the express purpose of encouraging initiative and originality in the individual school.

To meet the provisions of the new curriculum, there are requirements for paediatric and psychiatric nursing experience. Paediatric nursing will be required for student nurses who enter schools of nursing after August 31, 1950, and psychiatric nursing will be required after August 31, 1951.

The situation with respect of affiliations in hospitals at present is as follows:

Psychiatric Affiliation

Schools in which all students have experience . 14
 Schools in which a selected number of students have experience..... 26
 Schools in which no students have experience . 14

Paediatric Affiliation

Of the 63 Ontario schools of nursing, 41 have an affiliation in paediatric nursing. These affiliations are with hospitals in Toronto, Montreal, Detroit, Winnipeg, Ottawa and Hamilton. Nine schools of nursing have adequate clinical material in their own institutions, and 13 require further extension of the clinical programs.

Other Affiliation

Although a period of observation with the community agencies is not a provincial requirement, the program is developed as far as the agencies can accommodate students. The majority of schools provide for two to four days of observation with the Victorian Order of Nurses and public health agencies.

Four tuberculosis sanatoria offer courses of two to nine weeks in schools of nursing. At present only a small number of students from schools have had experience in tuberculosis nursing. The affiliation is limited to students who have a positive tuberculin reaction.

For a few schools who have limited clinical experience in the basic services of medicine and surgery, an affiliation has been arranged in order to meet provincial requirements.

Instructional Staff

Qualified instructors were available for the training schools for the first time in the early 1920's when postgraduate courses in teaching and supervision were established in universities. By 1944, the schools had one full-time instructor. In 1946, it was reported that two-thirds of the schools were conducting programs with no more than one or two classroom instructors. At that time a ratio of one classroom instructor to 46 students existed. In one situation, one instructor was employed to teach 14 courses and assist with the administrative duties of the hospital. There was no time to prepare lectures and mark examination papers. In December, 1948, a slight increase in the teaching staff was reported. The 108 instructors employed brought the ratio to one for every 41 students.

There has been an increasing number of instructors employed to teach on the hospital wards. In December, 1948, there were 77.

Taking into consideration all the instructional staff--classroom and ward--the ratio of instructors to students is now approximately one to 21.

Schools of Nursing Conducted by Special Hospitals

In order that the special hospital schools of nursing may meet requirements for registration, an affiliation in other types of hospital has been arranged.

The Sick Children's Hospital has an affiliation of six months in a general hospital in the

nursing of adults, and three months in psychiatric nursing in an Ontario mental hospital.

The Ontario Mental Hospital Schools provide for 15 months' affiliation--12 months in a general hospital and three months in a children's hospital.

The enrollment of students in the Ontario Mental Hospitals has gradually decreased. This is due largely to the fact that student nurses select the more general type of basic training.

Male student nurses are admitted to classes in one Ontario Mental Hospital. The number of male students enrolled at one time has never exceeded 12, and in 1948 there were eight.

Postgraduate Courses in Hospitals

Postgraduate courses have been arranged in a number of hospitals for nurses desiring additional experience. The courses range from two to six months in length, and are available in obstetrics, surgery (operating room), and psychiatry.

Organized postgraduate courses in Ontario are given at the following centres:

Hamilton General Hospital	Obstetrics
St. Michael's Hospital, Toronto .	"

St. Michael's Hospital, Toronto .	Operating Room
Toronto General Hospital	"

Weston Sanatorium	Tuberculosis
Hamilton "	"

Hospitals, as well, have been generous in arranging for added experience in special areas at the request of the individual nurse.

Several large hospitals have placed their facilities at the disposal of the University School of Nursing in place of conducting courses of their own.

Demonstration School of Nursing at the Metropolitan Hospital, Windsor.

The problem of preparing large numbers of clinical nurses to meet the demands of an expanding health field under a system that would make education subsidiary to the nursing needs of the hospital was brought before the Canadian Nurses' Association at their biennial meeting in 1944. The plan proposed then was (1) to ask the hospital to make financial arrangements for the nursing care of its patients, using graduate nurses and auxiliary workers employed and paid for this service, and (2) to ask nursing schools to find a source of income and then conduct their schools as educational institutions.

It was at this meeting that a demonstration school for a shorter period of training was proposed. When the Canadian Red Cross Society was approached for financial assistance in a problem confronting the

public, they made available to the Canadian Nurses' Association a sum of \$40,000 a year for four years to demonstrate a school.

Responsibility for the formulation of policies and administration of such a school was accepted by the Canadian Nurses' Association.

The immediate objectives of the experiment were:

(1) To establish a nursing school as an educational institution--a separate entity in its own right. This meant that the school would have financial and administrative independence, which would give it control over the use of its students' time.

(2) To demonstrate, if possible, that a skilled clinical nurse can be prepared in a period shorter than three years once the school is given full control over its students' time.

Although the students would continue to practice nursing in the wards of the hospital, the school and students would be freed from their present responsibility of maintaining the nursing service. The hospital would, at the request of the school, make its wards available for student practice to the extent asked for by the school, as long as the school accepted responsibility for the safety of this service.

The Metropolitan Hospital at Windsor which has no nursing school, agreed to participate in the project, and undertook to build a combined residence and teaching unit.

This school opened on January 19, 1948, with 13 students from five provinces. A second group of 24 students, again representing five provinces, was admitted in September, 1948. At December 31, 1948, there were 36 students in training. Students are eligible for registration in Ontario, and by agreement they are permitted to register in all other provinces. They are also eligible for postgraduate courses in university schools of nursing.

The purpose in conducting the school was to obtain the necessary freedom for research on the curriculum, and to find the most economical method by which clinical nurses can be prepared; in other words, to find the necessary costs of a nursing school, and to produce nurses who are in good health, who have developed personalities, and who like nursing and want to nurse.

There are five full-time nurse members of the staff.

The curriculum is planned for a period of 25 months, with experience arranged as follows: a preclinical term (science and nursing) of three months; medical nursing (including nutrition), four months; surgery (including operating room), four months; psychiatry, three months; obstetrics and paediatrics, four months; public health, communicable disease and tuberculosis, approximately three months; further surgery, one month; ward administration, one month; and vacation, two months.

The various experiences are not segregated as rigidly as the above table would imply. Mental hygiene, nutrition and preventive medicine, while taught directly at stated times, are associated at all times with the subject of nursing and nursing practice. The social aspects of nursing are emphasized throughout. The constant emphasis on preventive medicine or public health is made for several reasons--for the student's own health, for good bedside nursing; and to provide a sufficient foundation for further study in public health nursing. Although the practice of nursing in medical and surgical wards is provided at particular periods, it is also available in almost every hospital service (paediatrics, obstetrics, tuberculosis, etc.).

Since the demonstration is planned along the lines of other educational institutions, the students pay fees--\$50.00 a year--covering tuition, health service, and incidental expenses. Travelling expenses to other centres for affiliated experience cost the student approximately \$25.00. Board and lodging are supplied by the school when the student lives in residence. The students buy their uniforms, at a cost of approximately \$80.00. It is estimated that the total cost to the individual student is \$250.00.

(Since December, 1948, the school building has been completed and 34 more students have been admitted. A second class completed the course in October 1950, bringing the number of graduates to 36.)

University Schools of Nursing

Since 1920, when the University of Toronto and the University of Western Ontario introduced higher education in nursing to the province, increasing leadership has been given the profession by nurses able to take advantage of these courses.

Although five Ontario universities now offer courses in nursing, their total enrollment was 326 in 1948 as compared with 4,576 the same year in hospital schools. The number of nurses qualified to teach at the university level is severely limited, and only 27 were so employed at the time of this survey. Two of the five universities provide limited residence accommodation.

Both graduate and undergraduate courses are offered, with the former leading to diplomas in public health, nursing education, administration, and clinical supervision. At the University of Toronto the course in clinical supervision includes a 12-month course in psychiatric nursing. In connection with the latter course, provision is made for 12 bursaries of \$1,800 each per year, under the federal-provincial mental health grant. The University of Western Ontario provides a three-month course in psychiatric nursing in conjunction with the Department of Veterans' Affairs.

Undergraduate university nursing courses follow two distinct patterns--those in which general and professional subjects are integrated throughout the five-year course, and those in which academic subjects are superimposed on the hospital training

course. Both are five-year courses leading to the degree B.Sc.N. The courses have also been modified to enable graduates of hospital schools of nursing with suitable qualifications to proceed to the degree.

To meet the urgent need in public health and nursing education fields, a number of bursaries are now provided by the Ontario Department of Health, some local hospital boards, and some community agencies. These have effected a slight increase in enrollment.

A summary of the various university courses is provided in Table F11.

Training Facilities and Programs for Auxiliary Nursing Personnel

It is only within the past 10 years that anything more than brief, inservice training has been offered auxiliary nursing personnel, nurse aides, orderlies, and ward aides. Between 1941 and 1944, under stress of wartime, the Registered Nurses' Association of Ontario conducted, at its own expense, a series of six-month courses for practical nurses in London, Hamilton, and Toronto. A total of 108 persons completed the course, and as result of this demonstration a regular training plan was set forth. This plan was distributed in 1946 to all hospitals where in-service training was in effect. In February, 1946, the Canadian Vocational Training course adopted this syllabus.

In 1947, The Nurses' Registration Act was amended to establish the title, "Certified Nursing Assistant". The 108 practical nurses trained under the Registered Nurses' Association course and the 21 nursing assistants trained under the Canadian Vocational Training program have been granted certification as well as those trained in centres approved under the Nurses' Act.

Provincial Government Centres for Training Nursing Assistants

A nine-month course for the training of nursing assistants was started in September, 1946, under the joint auspices of the provincial Departments of Education and Health. This was the result of an inquiry made by the Minister of Health in June, 1946, concerning the shortage of nursing personnel in hospitals. Three centres were opened, at Toronto, Kingston and Hamilton. The Hamilton centre was closed in June, 1948, when the building was no longer available. (Since December 31, 1948, another centre has been opened at the Lakehead.)

The instruction staff is composed of registered nurses who have had postgraduate study in teaching and supervision, or with special experience. The staff at each centre consists of a chief instructor, an assistant instructor, and supervisors in the selected hospitals.

During the three months in the central school the trainees receive at least 480 hours of in-

struction in nursing and the structure and function of the human body. These two subjects include nutrition, personal hygiene, ethics, first aid, housekeeping, child management, and care of the well baby.

The program for clinical experience consists of four months in a hospital for the chronically ill, one month with children, and an elective month in a mental hospital or sanatorium.

Admission requirements are Grade VIII in education and a minimum age of 18 years.

On December 31, 1948, the results were:

Enrolled	595
Graduated	338
Certified	268
Still in training	95
Discontinued	162

The capacity of the two remaining centres--Toronto and Kingston--is 50 and 35, respectively.

A follow-up of the certified nursing assistants on December 31, 1948, showed that they were employed in hospitals in at least 19 cities, 24 towns, and three rural municipalities.

Other Approved Training Centres

Two institutions, the Prince Edward County Hospital, Picton, and the Mountain Sanatorium, Hamilton, were approved in 1946 for the training of nursing assistants. These courses followed the same plan as the provincial government courses. Forty nursing assistants had graduated from the Mountain Sanatorium, Hamilton, and 11 from the course in Picton by Dec. 31, 1948.

Other Courses for Auxiliary Nursing Personnel

Of the 17 public general hospitals reporting training programs on December 31, 1948, 14 gave only a brief in-service training at the commencement of employment. This personnel is called either nurse aide or ward aide, and there is considerable variation in the amount of instruction and in the nature of the duties assigned.

In the remaining three hospitals (Haileybury, Norfolk General and Clinton), courses of one and a half, two, and three years were being conducted, with an enrollment of approximately 35.

Organized courses are given in two hospitals for the chronically ill, St. Vincent in Ottawa and St. Peter's in Hamilton. In one case the course is one year, in the other 18 months, with a total enrollment of 43.

There is no standardized course given for male and female attendants within the Ontario Mental Hospitals. There is a variation in the amount of instruction from 12 hours to 150 in the courses given in 12 hospitals. In 1947 there were 193 enrolled.

TABLE F11
SUMMARY OF UNIVERSITY SCHOOLS OF NURSING IN ONTARIO

School	Courses Offered	Enrollment (1948)	Students in Receipt of Financial Aid	Residence Accommodation	First Year Course in Nurs. Offered
University of Toronto	Undergraduate: B. Sc. N. Graduate: Clinical Supervision Nursing Education (Gen. & Advanced) Nursing Administration (" ") Public Health Nursing Refresher & Extension courses.	Degree course - 72 Nursing Education - 42 Clinical Sup. - 42 Public Health - <u>119</u> 275	112	57	1920
McMaster University	Undergraduate: B. Sc. N.	Degree course - 37	9		1942
University of Ottawa	Undergraduate: B. Sc. N. Three year Diploma course Graduate: Clinical Specialties Public Health Nursing Nursing Education & Supervision	Diploma course - 84 Nursing Education - 7 Public Health - <u>9</u> 100	9	Provided by Ottawa General	1929
University of Western Ontario	Undergraduate: B. Sc. N. Graduate: Nursing Education Public Health Nursing	Degree course - 100 *Public Health - 21 *Nursing Education - <u>17</u> 120	42		1920
Queen's University	Undergraduate: B. Sc. N. Graduate: Nursing Education & Supervision Public Health Nursing	Degree course - 33 +Certificate - <u>7</u> 34			1942

*These include 18 students proceeding to degree.

+Six of whom are proceeding to degree.

At the Muskoka Hospital for Consumptives in Gravenhurst, and at the Beck Memorial Sanatorium in London, nurse aide instruction is organized when a group of new ward staff is employed. Instruction is given by a full-time and part-time instructor, respectively.

Two courses of 21 months in maternity nursing are offered by the Salvation Army Hospitals of Toronto and of Ottawa. The course has been established for some years, and the graduates find ready employment in their special field. The enrollment of these two schools is 65.

The well-baby-nurse course of 16 months given at the Canadian Mothercraft Centre, Toronto, enrolls students regularly. The enrollment is 30. The graduate of the course is in demand for the care of the well baby and newborn in homes.

Home Nursing Instruction

In Ontario, the Red Cross gave instruction to some 2,000 women who enrolled in their home nursing course in 1948. This course comprised a two-hour lecture each week for six months.

The homemaker program of the Red Cross also includes instruction in the elements of home nursing.

Visiting Homemakers

In Toronto, in the course conducted by the Visiting Homemakers' Association, instruction is given in the elements of patient care.

St. John Ambulance Brigade

The St. John Ambulance Brigade graduated 796 candidates in home nursing in 1948. This activity is the feminine counterpart of the first-aid training program for men.

Secondary School Training Program

In Grades XI and XII the obligatory course in health education includes home nursing and first aid. These must be considered as background courses rather than as courses to prepare staff for the health field.

Source of Trained Nursing Personnel

The supply of trained nursing personnel depends first of all upon the numbers of young women available for training, and then upon their attraction to the profession.

The province of Ontario, in common with other communities of the world, suffered through the major depression of the 1930's. Unfavorable economic conditions in that period drastically diminished the number of marriages and births. Today this fact assumes major significance, curtailing as it does the actual numbers of young women in the age group from

which the nursing profession normally recruits its trainees. Analysis of the past 19 years and a projection of this in relation to the estimates population of Ontario up to 1966 is shown in Table F12.

Table F12 reveals that the number of young women entering their 19th year during the years 1950 to 1958 will be at the lowest level for many years. When this is related to the steadily increasing population of Ontario it can be seen that this rate falls as low as 5.8 per 1,000 of population in 1955, and little relative improvement can be expected before 1960. Yet the opportunities for these young women, not only in the health field, but in teaching, social service and welfare work, in business and industry, are increasing steadily each year. The prospect of recruiting nursing students from this limited source and in the face of stronger competition is not bright. The attractions of nursing have to be enhanced and given favorable publicity.

A second limiting factor is the small proportion of even these available young women who can qualify on educational grounds to enter nursing. Candidates for admission to basic professional schools of nursing are required to hold Grade XII or Grade XIII diplomas without options. A study by the Ontario Department of Education shows that of 100 pupils entering elementary school only 21 qualify for Grade XII diplomas, only 13 for Grade XIII.

For the school year 1948-49 there were 4,222 girls in Ontario who earned their Grade XII diploma, another 2,243 Grade XIII. This gives a total of 6,465 high school graduates who might be considered eligible for nursing education. Of these, 1,138 actually entered training (17.6 per cent). Recruits for nursing assistant training come from Grades IX, X, and XI.

Enrollment in approved schools of nursing is set down in Table F13. It may be noted that there was an enrollment of 1,779 first-year students in 1949. It was shown above that 1,138 of these came directly from Ontario secondary schools. The remaining 641 came from outside the province and also from earlier high school graduating classes.

Wastage from Classes in Hospital Schools of Nursing

Withdrawal from hospital schools of nursing between enrollment and graduation is sufficiently high to merit attention. Considering the total enrollment in all Ontario schools over a period of 10 years (1938 to 1947), and following all these classes through to their graduating years (1940 to 1949), there is found to be an average loss of 17.4 per cent over the three years of training. In other words, of the total of 16,030 students who enrolled in the first year of the course between 1938 and 1947 inclusive, 13,225 graduated.

The loss was substantially heavier between the first and second year of training than between the second and final year. In 1948, for example, there were 261 withdrawals from approved schools of nursing in Ontario--equal to 5.4 per cent of the 4,769

students enrolled in all classes at December 31, 1948. Of these 261, a group of 187, or 71 per cent withdrew before entering their second year of training. This is by far the most costly period to the hospital because the student has contributed very little nursing service up to this time.

Health was indicated as a major cause of withdrawal from the course, closely followed by "dislike of nursing" or "disappointment in the course", then by matrimony, and less than any of these, failure in class work.

TABLE F12

ESTIMATED NUMBER OF FEMALES SURVIVING TO THE AGE OF 18 YEARS IN ONTARIO FROM 1948 TO 1966

Year of Birth	Number of Female Births (1)	Estimated Female Survival Rate to 19th Year of Life (2)	Year of Arrival at Age 18	Number Surviving to the Age of 18	Total Estimated Population (3)	Estimated Number of 18-year-old Females per 1,000 Population
1930	34,871	90.7	1948	31,628	4,297,000	7.4
1931	33,600	91.1	1949	30,610	4,411,000	6.9
1932	32,676	91.4	1950	29,866	4,477,000	6.7
1933	31,016	91.8	1951	28,473	4,544,000	6.3
1934	30,384	92.1	1952	27,984	4,612,000	6.1
1935	30,702	92.5	1953	28,399	4,681,000	6.1
1936	30,327	92.8	1954	28,143	4,751,000	5.9
1937	29,990	93.2	1955	27,951	4,822,000	5.8
1938	31,959	93.5	1956	29,882	4,894,000	6.1
1939	31,188	93.9	1957	29,286	4,967,000	5.9
1940	33,578	94.2	1958	31,630	5,042,000	6.3
1941	35,008	94.5	1959	33,083	5,118,000	6.5
1942	37,780	94.7	1960	35,778	5,195,000	6.9
1943	39,581	94.9	1961	37,562	5,273,000	7.1
1944	37,635	95.1	1962	35,791	5,352,000	6.7
1945	38,157	95.3	1963	36,364	5,432,000	6.7
1946	47,061	95.5	1964	44,943	5,513,000	8.2
1947	53,137	95.5	1965	50,746	5,596,000	9.1
1948	50,723	95.5	1966	48,440	5,680,000	8.5

(1) Source: The Registrar General.

(2) Source: Life Tables for Canada and Regions, 1941, and 1931. It is assumed that life expectancy has gradually increased in the interval 1931 to 1941.

(3) Estimated Population: After year 1949, assume population increased at the rate of 1.5 per cent per year.

Average for ten-year period 1939-1949 has been 1.9 per cent so that projected rate of increase would appear, if anything, to be conservative.

TABLE F13

ENROLLMENT AND WASTAGE OF CLASSES IN ONTARIO SCHOOLS OF NURSING

(Including public general and mental hospital schools, and university schools at McMaster and Toronto)

Year of Enrollment in 1st Year of Course	Number Enrolling in 1st Year Class	Percentage Loss Between 1st & 2nd Year of Course	Number Reaching 2nd Year of the Nursing Course	Percentage Loss Between 2nd & 3rd Year of Course	Number Reaching 3rd Year of the Nursing Course
1936	1, 143	3. 23	1, 106	(see Note I)	1, 212
1937	1, 248	3. 37	1, 206	2. 40	1, 177
1938	1, 443	10. 53	1, 291	1. 00	1, 278
1939	1, 660	21. 87	1, 297	(see Note I)	1, 347
1940	1, 583	13. 08	1, 376	(" " ")	1, 377
1941	1, 496	8. 02	1, 376	3. 92	1, 322
1942	1, 566	21. 39	1, 231	(see Note I)	1, 292
1943	1, 543	20. 93	1, 220	4. 92	1, 160
1944	1, 531	8. 81	1, 396	10. 24	1, 253
1945	1, 724	18. 04	1, 413	9. 20	1, 283
1946	1, 657	13. 69	1, 430	(see Note I)	1, 475
1947	1, 827	11. 54	1, 616	4. 83	1, 538
1948	1, 670	4. 37	1, 597		
1949	1, 779				

Note I: The third year class appears greater than the corresponding second year at times because it includes carry-over students from the previous graduating year and fourth and fifth year students in the university course.

CHAPTER III

INSTITUTIONAL NURSING CARE

Inventory of Nursing Force at December 31, 1948

In the preparation of inventory, a comprehensive list of places of employment of nursing personnel was assembled, and may be seen in Table F14. Over 30 places of work have been found in the institutional field alone. Of this group, the public general hospital field employs the greatest number--4,011 full-time graduate registered nurses, or 63.9 per cent of the whole institutional nursing force. Of this number 205 are employed in educational capacities, that is, primarily for the schools of nursing. Within this force also are 1,502 nurses who fill administrative and supervisory positions in the nursing service. In the smaller institutions these nurses may contribute a substantial amount of time to actual bedside nursing. The Department of Veterans' Affairs employed 539 registered nurses, followed closely by the sanatoria with 387, and the Ontario mental hospitals with 344. Because of the difficulty in assessing the contribution to nursing care, and in order to avoid confusion, the numbers of part-time registered nurses are not indicated in this table. In total, this group amounts to 611, or 9.7 per cent of the graduate staff. In the public general hospitals, a total of 267 registered nurses were serving in positions not directly related to patient care, i. e., as x-ray or laboratory technicians, in admitting offices, and so on.

Table F14 shows that 6,628 individuals or 53.4 per cent of the whole institutional nursing force, had professional training. The assistant nursing group was made up of 3,501 female nursing assistants and 2,262 medical attendants or orderlies with various degrees of training. It may be noted that the number of assistant nursing person-

nel who had certification was extremely low. In the sanatoria and the Ontario mental hospitals, and indeed in some of the public general hospitals, there has been a program of in-service training. It is also interesting to find that although it has been assumed that the largest field of opportunity for the assistant nursing group lay in other than the public general field, this does not appear to be the case, for a total of 2,145 persons gave full-time service in these hospitals.

The contribution of 4,769 student nurses in training in hospital and university schools of nursing must of course be added to the total force. This relates primarily to hospitals which conduct schools of nursing.

Institutional Nursing Needs

In point of nursing needs, Ontario's 15 mental hospitals and 146 public general hospitals far outstripped other types of institutions. As of Dec. 31, 1948, there were 15,969 patients in the 14 Ontario mental hospitals and a further 71 in Toronto Psychiatric Hospital (see Section B, Vol. I, Report of the Ontario Health Survey Committee). During the same year, public general hospitals in the province provided more than 5½ million days of care for 467,137 adults, children and newborn infants (see Section A, Vol. I of this report).

All told, the public general, mental, chronic and convalescent hospitals and sanatoria were called upon to provide 13,530,395 days of hospital care during the survey year. This may give some measure of the tremendous demand for nursing services in the institutional field.

TABLE F14

INSTITUTIONAL NURSING PERSONNEL INVENTORY OF ONTARIO

(December 31, 1948)

	GRADUATES		NURSING ASS'TS FEMALE		NURSING ASS'TS MALE
	Reg.	Not Reg.	Cert.	Not Cert.	
GOVERNMENTAL					
I - Federal					
Dept. of Veterans' Affairs	539				
Indian Health Services	16				
Dept. of National Defence	58				
Dept. of Justice (Penitentiaries)	a				
Other federal agencies	a				
SUBTOTAL	613		a	a	a
II - Provincial					
Ontario Hospitals (Mental)	344	64		715	1,240
Jails, reformatories, etc.	9	2			
Division of Nurses Registration	4				
Experimental C. N. A. course	9				
Inspector of Obstetrical Nursing	1				
SUBTOTAL	367	66		715	1,240
III - Local or County					
Homes for the Aged	3			20	
Isolation Hospitals	13			4	17
SUBTOTAL	16			24	17
NONGOVERNMENTAL					
I - Nonprofit					
Public General Hospitals and Red Cross Outpost Hospitals					
(i) Patient care	3,806	222	172	1,334	639
(ii) Hospitals Schools of Nursing	205				
(iii) Other than nursing duties	267				
Convalescent Hospitals	9	2		11	2
Hospitals for Chronically Ill	141	41	22	313	64
Sanatoria	387			358	107
I. O. D. E. Children's Preventorium (TB)	9		1	32	
Other institutions giving in-bed care					
(i) Universities and Colleges	15			9	
(ii) Private Schools	40			20	
(iii) Homes for Aged	34			74	24
(iv) Orphanages, Children's Homes	21		13		
Other health agencies					
(i) Registered Nurses' Association of Ontario	1				
(ii) Mothercraft (Toronto)	4		3		
University Schools of Nursing	27				
SUBTOTAL	4,966	265	211	2,151	836
II - Proprietary					
Licensed private hospitals	145	12		137	32
Registered maternity boarding homes)					
Nursing Homes)	140			247	93
Private mental hospitals (including alcoholic)	26	12		16	44
Other private agencies	a				
SUBTOTAL	311	24		400	169
GRAND TOTAL	6,273	355	211	3,290	2,262

(a) Information not completely available.

TABLE F15
GRADUATE AND STUDENT NURSES IN PUBLIC GENERAL HOSPITALS IN ONTARIO
(INCLUDING RED CROSS OUTPOSTS AND CANADIAN MOTHERCRAFT CENTRE)

Year	No. of Patients	Graduate Nurses	Student Nurses	Total Nurses	Total Patient Days of Care (Infant Days at 25% of Adult)	Patient Days Per Graduate Nurse	Patient Days for All Nurses	Patients Per Graduate Nurse
1933	222, 112	1, 251	2, 821	4, 072	2, 784, 506	2,255.8	683.8	177.55
1938	283, 005	2, 105	3, 062	5, 167	3, 312, 939	1,574.3	641.4	134.00
1939	294, 984	2, 156	2, 982	5, 138	3, 407, 270	1,580.4	663.2	136.82
1940	318, 815	2, 288	3, 307	5, 595	3, 595, 315	1,571.3	642.6	139.34
1941	348, 012	2, 384	3, 482	5, 866	3, 707, 638	1,555.2	632.0	145.98
1942	374, 896	2, 652	3, 140	5, 792	3, 900, 465	1,470.8	673.4	141.36
1943	397, 859	2, 909	3, 338	6, 247	4, 135, 779	1,421.7	662.0	136.77
1944	419, 027	3, 053	3, 327	6, 380	4, 328, 426	1,417.8	678.4	137.25
1945	448, 943	3, 173	3, 586	6, 759	4, 576, 747	1,442.4	677.1	141.48
1946	510, 665	3, 665	4, 522	8, 187	4, 819, 065	1,314.9	588.6	139.33
1947	548, 445	4, 093	4, 727	8, 820	4, 900, 606	1,197.3	555.6	133.99
1948	568, 823	4, 339	5, 028	9, 367	5, 034, 504	1,160.2	537.5	131.10

CHAPTER IV

PRIVATE PRACTICE OF NURSING

Agencies Bringing Private Nursing Service to the Public

There are 26 nonprofit community nursing registries operating under professional direction in 24 cities and two towns in Ontario. Registry lists are maintained by hospitals in those communities with hospitals but without community registries. Fourteen registries are operated privately, in Toronto (10), Hamilton (2), Ottawa (1), and Windsor (1), and there is little or no regulation over their operation.

The community nursing registry program was initiated and sponsored by the Registered Nurses' Association of Ontario, and the association retains a registry adviser to act as consultant. The community registry is operated under local boards of directors comprising interested citizens and representatives of the local government and the medical and nursing professions. It functions under a constitution and by-laws which are standardized in all registries except Toronto's, and under local regulations established to meet local needs. Membership is open to all who provide nursing care, professional and nonprofessional, and who are properly qualified. Community nursing registries are financed mainly by annual membership fees and the revenue from telephone service supplied by the office to doctors and other related groups. Some monetary assistance is received from Community Chests; grants from municipalities, hospitals, industries and service clubs; and contributions from interested persons and group efforts in the community.

The province of Ontario has assisted with the program by a grant of \$5,000 per year to the Registered Nurses' Association for purposes of central administration.

The Function of Registries

In addition to serving as a 24-hour-a-day clearing house for calls for nursing service and channeling suitably qualified personnel to cases of need, the registries provide an employment service to industrial and other community groups seeking permanent nursing staff; they supply necessary and otherwise unobtainable telephone-answering service to visiting nurse organizations, doctors, and other interested groups, and by checking the credentials of all personnel registered with them, they help to protect the public against the employment of unqualified nursing service.

An important function of the registry is in the allocation of nursing service to cases of greatest need. They endeavor to assign private duty nurses and nursing assistants on this priority basis to -

- (a) The critically ill in homes.
- (b) The critically ill and acutely ill and injured in hospitals requiring continuous care and observation.
- (c) Staff duty in hospitals on a temporary basis.
- (d) Other agency needs (e.g., visiting nurses relief).
- (e) Health services, industrial nursing, and other.

Fields of Activity of Private Practice Nursing

The professional nurse in private practice may serve individual patients in hospitals, nursing homes, private homes or hotels, where she may be required to give continuous care and observation or to provide shared nursing care to two patients. She may also be employed by the hour, or simply to meet an emergency and provide care in the event of sudden illness or accident where the patient cannot be moved. Such agencies as hospitals, clinics, visiting nurse services, or private industry may require the assistance of a private nurse from time to time to relieve regular staff during absence or through periods of peak activity. Such disasters as floods, fires and train wrecks, involving heavy casualties, may bring the private nurse into voluntary service duty.

Nursing assistants (certified and not certified) provide continuous simple nursing care in patients' homes, in nursing homes, in some hospitals, and in some industrial plants. Visiting homemakers and mothercraft nurses in private practice take on domestic duties during time of illness, and look after mother and baby immediately after their return from hospital.

Training for Private Practice Nursing

The professional training of nurses has been covered in Chapter II. The education of non-professional nurses engaged in private practice is not well organized. A large number of nursing assistants ("practical nurses") receive no formal preparation for their duties.

TABLE F16

NURSES IN PRIVATE PRACTICE AS REPORTED BY COMMUNITY NURSING REGISTRIES
(As of December 31, 1948)

Classification	Community Nursing Registry	Commerical Registry*	Hospital Call List	TOTAL
PROFESSIONAL				
Registry Administrator	86			86
Private Duty (Full time)	2,382	44	346	2,772
Private Duty (Part time)	329		353	682
PROFESSIONAL TOTAL	2,797	44	699	3,540
NONPROFESSIONAL				
Nursing Assistant (Certified)	63			63
Nursing Assistant (Not Certified)	183	220		403
Male Nursing Assistant	3			3
Visiting Housekeeper	14			14
NONPROFESSIONAL TOTAL	263	220		483

*Complete figures on commercial registries are unobtainable because records are not required by law.

TABLE F17

DEMAND FOR PROFESSIONAL PRIVATE DUTY NURSING SERVICE
AS REPORTED BY COMMUNITY REGISTRIES FOR 1948

Source of Demand	Type of Service						Total Calls Filled	Total Calls	Total Calls Unfilled
	Private Duty		Shared Nursing		Other Duty				
	Calls	Calls Filled	Calls	Calls Filled	Calls	Calls Filled			
Hospitals	72, 835	58, 999	153	151	1, 898	1, 523	74, 886	14, 213	
Home	5, 509	5, 437	4	4			5, 513	5, 441	72
Public Health (Including V. O. N.)					127	121	127	121	6
Industrial					47	47	47	47	
Other					54	54	54	54	
PROFESSIONAL TOTAL	78, 344	64, 436	157	155	2, 126	1, 745	80, 627	66, 336	14, 291

TABLE F18

DEMAND FOR NONPROFESSIONAL PRIVATE DUTY NURSING SERVICE
AS REPORTED BY COMMUNITY REGISTRIES FOR 1948

Type of Service Sought	Total Calls	Calls Filled	Calls Unfilled
Nursing Assistant	2, 980	1, 820	1, 160
Housekeeper	126	83	43
Orderly	21	12	9
TOTAL	3, 127	1, 915	1, 212

TABLE F19

TYPE AND NUMBER OF CASES SERVED BY PRIVATE DUTY NURSES
IN 1945-1948 AS REPORTED BY COMMUNITY REGISTRIES

TYPE OF CASE	1948	1947	1946	1945
Accident	1, 296	1, 252	990	861
Alcoholic and Drug Addict	330	254	213	995
Communicable Disease	394	339	514	256
General Staff Hospital	1, 898	2, 584	4, 290	5, 334
Industrial Nursing	47	55	173	128
Medical Nursing	18, 323	18, 128	17, 909	18, 042
Obstetrics	4, 955	4, 965	5, 301	4, 719
Paediatrics	2, 178	1, 536	1, 488	1, 450
Psychiatric	607	338	332	248
Public Health	127	259	221	208
Surgical	50, 010	50, 539	50, 570	50, 225
Tuberculosis	188	157	143	112
Other	54	48	61	86
GRAND TOTAL	80, 407	80, 454	82, 205	82, 664

DATA FROM 1948 RECORD ONLY: (14 registries)

41 per cent of calls were for the night period, 32 per cent morning period and 27 per cent afternoon period.

TABLE F20

LENGTH OF PRIVATE DUTY CASES REPORTED BY NURSING REGISTRIES IN

23 ONTARIO COMMUNITIES FOR 1948

Location of Registry	Cases lasting 1-3 days inclusive	Cases lasting 4-7 days inclusive	Cases lasting 8-11 days inclusive	Cases lasting 12-16 days inclusive	Total nursing days all cases 1948
Belleville	702	288	129	66	9,034
Brantford	350	274	71	35	7,996
Chatham	378	192	87	34	5,658
Cornwall	189	84	26	22	5,109
Fort William & Port Arthur	433	186	60	35	5,792
Galt	122	78	36	22	4,147
Goderich	86	36	15	6	1,254
Guelph	1,122	436	170	76	11,071
Hamilton	929	837	371	362	39,298
Kingston	376	157	98	86	12,483
Kitchener	940	341	171	84	11,135
London	1,368	819	469	301	32,760
North Bay	414	194	54	37	3,498
Oshawa	658	352	103	61	7,035
Ottawa	2,426	1,278	527	360	40,275
Owen Sound	253	96	44	38	2,920
St. Catharines	1,111	729	164	82	13,045
Sarnia*	434	240	71	64	6,700
Sault Ste. Marie	761	276	52	34	6,102
Stratford	294	193	203	195	6,263
Sudbury	1,167	390	106	86	10,086
Toronto	5,492	4,904	1,930	1,407	251,427
Windsor	2,100	908	375	173	23,958
TOTAL CASES	22,105	13,288	5,332	3,666	
TOTAL NUMBER OF NURSING DAYS					517,046

Total cases, 1-7 days, 35,393

Total cases, 8-16 days, 8,998

*For 6 months only.

CHAPTER V

PUBLIC HEALTH NURSING

It is estimated that about 60 per cent of the population of Ontario has the benefit of health services with full-time personnel, and a further 15 per cent receives the attention of a part-time medical officer of health assisted by a full-time nursing service. The remaining 25 per cent represents in most instances rural organized and unorganized territory without public health nursing service.

In addition to these official services, many persons receive care in their homes on a visit basis by nongovernmental agencies. Except in Toronto and Hamilton, where the St. Elizabeth Visiting Nurses Association assists, this service is provided almost exclusively by the Victorian Order of Nurses. Other nongovernmental agencies sharing a part of the public health burden include the Red Cross Public Health Service, Hospital Health Service, Industrial Health Service, Ontario Society for Crippled Children, Metropolitan Life Insurance Company, service clubs, and social agencies.

Besides generalized family service, public health nursing covers such specialized work as visiting, school and industrial nursing, tuberculosis, venereal disease, nursing, out-patient departments of hospitals, orthopaedic, and mental hygiene work.

Education in public health nursing is available in the four Ontario universities as indicated in Table F11. Both degree and certificate courses are offered, as well as refresher courses.

At the nonprofessional level, part of the public health nursing program is carried out by

nursing assistants, prepared by a nine-month course under government auspices; by volunteers through Red Cross, Junior League and St. John Ambulance Brigade; by visiting homemakers (who may carry out simple nursing procedures under supervision of a public health nurse); and by matrons of the Department of Health, Toronto, and trained first-aid workers.

It is realized that although a substantial proportion of the population already has a full-time health service, there remains an opportunity to extend existing services and to enrich the contribution of public health nursing to these services--provided personnel can be trained and made available to accomplish this. There is an increasing public demand for social and health services generally, which tends to put greater emphasis on the importance of public health nursing in the community.

Table F21 provides a summary of the type of work in which 1,020 qualified public health nurses were employed at Dec. 31, 1948. Nearly two-thirds of the total were in some form of government service--602 of them at the municipal level, 11 with the provincial government, and 19 in federal agencies. In addition to the 1,020 registered nurses with special preparation in public health nursing, there were a further 468 graduates engaged in public health work but lacking special postgraduate preparation. More than 90 per cent of these are employed in industrial health services.

TABLE F21

SUMMARY OF INVENTORY OF PROFESSIONAL PUBLIC HEALTH NURSING PERSONNEL
as of December 31, 1948

I. Governmental	P. H. N. Reg. N.	Reg. N*	TOTAL
1. Municipal			
Boards of Health	363		363
Public Health Units	185		185
Board of Health; School Service	17		17
Board of Education; School Service	37		37
2. Provincial			
Department of Health	10		10
Department of Agriculture	1	3	4
3. Federal			
(a) Child and Maternal Health Division		1	1
(b) Department of National Defence	3		3
RCAMC	2		2
RCAF	14		29
(c) Health Service		15	29
Subtotal	632	19	651
II. Nongovernmental			
Visiting Nursing			
Victorian Order of Nurses	245		245
St. Elizabeth Visiting Nurses' Association	18		18
Red Cross Public Health Service	8		8
Hospital Health Service - including T.B. Sanatoria, Mental Hospitals	42		42
Ontario Society for Crippled Children	9		9
Industrial Health Service	36	437	473
Service Clubs		5	5
Social Service Agencies	9	7	16
Subtotal	367	449	816
University Schools and Departments	7		7
Hospital Schools of Nursing	14		14
Subtotal	21		21
GRAND TOTAL			1, 488

*Without special preparation in public health nursing.

**REPORT OF THE ONTARIO
HEALTH SURVEY COMMITTEE**

SECTION G

**PREVENTION, TREATMENT AND CONTROL
OF TUBERCULOSIS**

(Pages 301 to 334)

PREVENTION, TREATMENT AND CONTROL OF TUBERCULOSIS

CONTENTS

	Page
Summary.....	304
Recommendations.....	305
Chapter I: Tuberculosis in Ontario	306
Chapter II: Existing Administration.....	308
Chapter III: Prevention and Diagnostic Facilities	311
Chapter IV: Treatment Facilities	320
Chapter V: Postsanatorium Care and Rehabilitation, Including Vocational Training	333

PREVENTION, TREATMENT AND CONTROL OF TUBERCULOSIS

SUMMARY

In 1948, the basic year of this survey, 825 persons died of tuberculosis in Ontario, and 2,114 patients were admitted for the first time to the province's 14 sanatoria. At the close of that year there were 3,673 patients in sanatoria under treatment for tuberculosis --59 of them residents of other provinces, 23 nonresidents of Canada, and 110 Ontario patients without municipal residence.

As shown in Chart G1, the death rate in Ontario from tuberculosis has dropped encouragingly during the first half of this century. It has been brought down from 160 per 100,000 population in 1900 to 19.2 per 100,000 in 1948. For several years Ontario has had the lowest tuberculosis death rate among all the provinces of Canada.

Credit for this degree of control over the disease is attributed to a combination of governmental and voluntary effort; and it has not been achieved without heavy financial investment. In the year ending December 31, 1948, the Division of Tuberculosis Control of the Ontario Department of Health paid out \$4,192,123 to the 14 sanatoria for the maintenance of patients. Patients themselves paid only \$161,084, and 75.9 per cent of them paid nothing toward the cost of their care--except insofar as they contributed as members of the taxpaying public.

Twelve of Ontario's 14 sanatoria are operated and controlled by boards of directors elected from the membership of various voluntary associations, one is operated by a religious order, and one by a board nominated by the United Counties Council of Dundas, Stormont, and Glengarry. These institutions are self-governing, the government of the province paying the cost of overhead, normal ward service, surgery, laboratory and dental ser-

vices for each resident of Ontario undergoing treatment in them. In addition to the 3,941 beds in the 14 sanatoria, there are also 600 beds for mental patients suffering from tuberculosis in the Ontario mental hospital at Woodstock.

Sale of Christmas seals is the prime source of revenue for 107 (as of Dec. 31, 1948) local tuberculosis associations and committees affiliated with the Ontario Tuberculosis Association in providing free diagnostic and preventive service across the province. The 1949 Christmas seal sales campaign grossed approximately \$670,000, of which 18 per cent was used to defray operating costs. Chief service provided by this money is found in more than 130 regular, periodic, free chest x-ray clinics throughout the province, and in special x-ray projects for community and occupational groups.

Table G1 helps to demonstrate the value of the mass x-ray survey technique. It shows that in the years 1942 to 1948, inclusive, 1,242,772 persons were x-rayed; and 5,957 cases of pulmonary tuberculosis, and 20,774 other abnormal chest conditions were thus discovered. Extension of the program of x-raying patients admitted to public general hospitals has also proved efficacious (see Table G8).

Another important phase of tuberculosis control is the provision of follow-up care to patients discharged from sanatoria. In 1948 municipalities paid \$349,471 for the postsanatorium care of 1,320 persons; and the Ontario government added another \$30,000 on behalf of ex-patients without municipal residence. The province also spent \$100,000 on special pneumothorax and pneumoperitoneum treatments for discharge patients.

PREVENTION, TREATMENT AND CONTROL OF TUBERCULOSIS

RECOMMENDATIONS

It is recommended that, -

- 1 - Consideration be given to the discontinuance of the collection of maintenance charges for patients (amounting in 1948 to \$ 161,084.43 or 3.8 per cent of the amount contributed by the province) (Chapter IV).
- 2 - The Ontario Department of Health re-examine the financial position of sanatoria with a view to possible revision of the present basis of payment of maintenance grants to sanatoria and that such grants include the costs of all services necessary for the treatment of patients (Chapter II).
- 3 - The Government of Ontario assume 50 per cent of the expenditures on postsanatorium care made by municipalities under The Sanatoria for Consumptives Act for patients discharge from sanatoria (Chapter V).
- 4 - The fee of 30 cents collected by the Ontario Department of Health from voluntary agencies for each patient who is x-rayed in the course of a community x-ray survey for tuberculosis be eliminated (Chapter II).
- 5 - A sanatorium be constructed at Sudbury to accommodate 140 patients and that consideration be given to an additional 100 beds at Weston (Chapter IV).
- 6 - Section 45 of The Sanatoria for Consumptives Act be amended so that a contact of an active case of tuberculosis be required to submit to the same examinations as a suspected case (Chapter II).
- 7 - Equipment for taking chest x-rays of all patients upon admission to public general hospitals be made available to all hospitals which are able to make effective use of this service (Chapter III).
- 8 - All school teachers be required to have periodic examinations for tuberculosis including chest films and that periodic surveys of secondary school students be conducted (Chapter III).
- 9 - The federal immigration authorities extend the requirements for chest x-ray of immigrants to include those coming in on a visitor's passport. (This is not intended to apply to persons entering for a short stay on a visitor's permit) (Chapter III).
- 10 - Consideration be given to the establishment of a limited number of clinics by the Ontario Department of Health where BCG vaccine can be administered and a record kept of the results (Chapter III).
- 11 - Consideration be given to the appointment of two provincial officials to assist discharge patients in their rehabilitation; to the provision of vocational training for patients and psychological tests for patients needing this service (Chapter V).
- 12 - Reporting of cases of pulmonary tuberculosis include active, questionably active, inactive and reactivated cases; and that extrapulmonary cases, such as meningitis and miliary, be reported (Chapter II).

CHAPTER I

TUBERCULOSIS IN ONTARIO

The death rate from tuberculosis is one method of measuring the incidence of the disease. It is also a useful method of measuring the results of steps taken toward the control of tuberculosis, by comparing the death rate with the death rates prevailing in previous years, as well as with those prevailing in other provinces and countries.

The death rates from tuberculosis in Ontario for the years 1900 to 1948 are shown in Chart G1. In this chart the rate is given per 100,000 population.

It will be noted that there is a substantial decline in the death rate each year, reaching a rate of 19.2 per 100,000 in the year 1948 and 15.6 in 1949.

For several years the province of Ontario has had the lowest death rate of any province in Canada.

In the year 1948, 825 persons died of tuberculosis in Ontario. In 1949 there were 686 deaths from tuberculosis in the province.

In 1948 there were 2,114 patients admitted for the first time to sanatoria, and in 1949 there were 2,090 first admissions.

At the end of 1948 there were 3,673 patients in sanatoria under treatment for tuberculosis. Of

this number 59 were residents of other provinces, 23 were nonresidents of Canada, 110 were residents of Ontario without a municipal residence, and 3,481 were residents of Ontario from organized municipalities. As of December 31, 1949, the number of patients under treatment in sanatoria in Ontario was 3,747.

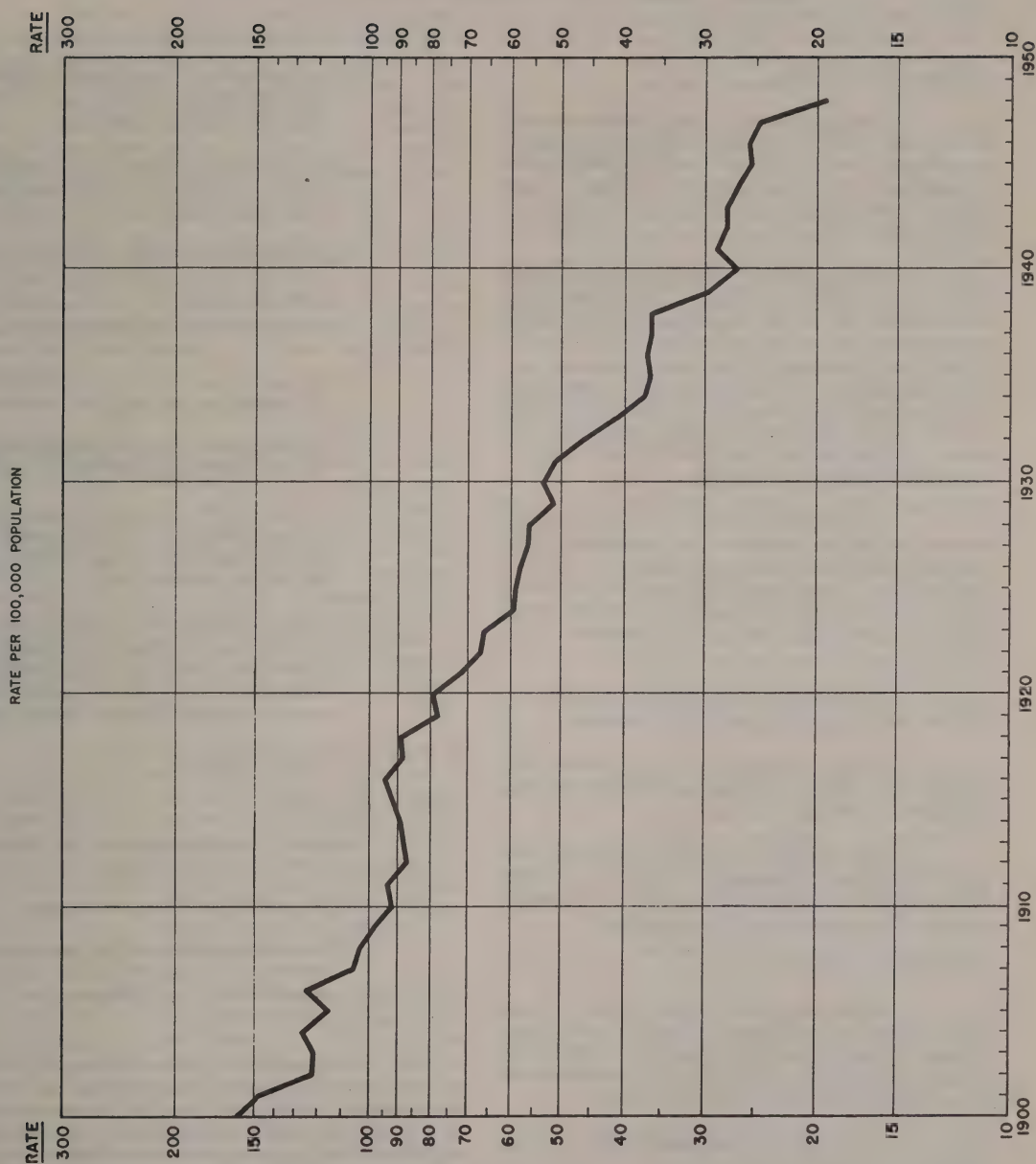
Average length of stay in 1948 was 404 days. In 1949 it was 439 days.

From the foregoing figures it is apparent that the tuberculosis control program in Ontario has achieved a substantial degree of success. The program may be described as a combination of governmental and voluntary effort. The nature and extent of the facilities provided through this combined effort and suggestions for their extension and improvement are dealt with in this section of the report.

Days of sanatorium care in Ontario in 1948 totalled 1,294,461, of which the provincial government paid for 1,063,309; Workmen's Compensation Board for 11,853; Department of Veterans' Affairs 116,920; Indian Health Services 79,870; and others 22,509. The 1949 days of care totalled 1,347,464, and the comparable breakdown is as follows: provincial government 1,112,664; Workmen's Compensation Board 13,291; Department of Veterans' Affairs 127,935; Indian Health Services 83,244; and other 10,330.

TREND IN TUBERCULOSIS MORTALITY ONTARIO, 1900 - 1948

CHART G1



CHAPTER II

EXISTING ADMINISTRATION

Central Administration

Central control is exercised by the Ontario Department of Health through the division of tuberculosis control. This division is responsible in a general way for all measures relating to prevention, treatment and rehabilitation in the field of tuberculosis.

More specifically, the division administers (subject to the Minister of Health) the Sanatoria for Consumptives Act and the regulations and distributes the provincial capital and maintenance grants to sanatoria. The Province of Ontario pays the major portion of the cost of maintaining patients in sanatoria. In the year ending December 31, 1948, the sum of \$4,192,123.79 was paid to sanatoria for this purpose. Patients paid only the relatively small sum of \$161,084.43 during this period.

The division of tuberculosis control operates in the field of prevention by maintaining close liaison with two voluntary agencies, the Ontario Tuberculosis Association and the National Sanitarium Association and by providing the equipment and staff to undertake mass x-ray surveys for the former.

The division pays for pneumothorax refills for patients discharged from sanatoria.

Under a federal grant, the division distributes BCG vaccine free of charge to physicians, hospitals and sanatoria.

The division exercises a general control over post-sanatorium care of discharged patients and pays a living allowance to indigent, discharged patients who have no municipal residence.

Local Administration

There are certain responsibilities placed upon either the local board of health or the local medical officer of health in respect to tuberculosis control. These responsibilities may be divided into two categories, statutory and nonstatutory.

The statutory responsibilities include the following matters, -

- (a) reporting cases of tuberculosis to the Ontario Department of Health;
- (b) notification of change of address by tuberculous patients who move to another municipality;

- (c) arrangements for discharged patients, including the cost of post-sanatorium care for indigent patients;
- (d) examination (compulsory if necessary) of persons who are suspected to be suffering from tuberculosis;
- (e) initiating compulsory treatment for persons who are infectious and refuse treatment.

The non-statutory responsibilities include, -

- (a) the maintenance of a local register of tuberculous patients and contacts;
- (b) encouragement of and participation in community chest x-ray surveys;
- (c) assistance to practising physicians in arrangements for examination of patients and contacts and admission of patients to sanatoria;
- (d) arrangements for examination of persons who may have been in contact with tuberculosis and for regular examination of persons who are unduly exposed by nature of their occupation;
- (e) public education.

Voluntary Agencies

Voluntary participation in the control of tuberculosis falls into two categories, -

- (a) the operation of sanatoria; and
- (b) the raising of funds for preventive measures through the sale of Christmas seals by local tuberculosis organizations.

Twelve of the fourteen sanatoria in the province are operated and controlled by boards of directors who are elected from the membership of various health or sanatorium (voluntary) associations concerned with the prevention and treatment of tuberculosis. The remaining two sanatoria at Haileybury and Cornwall are operated by a religious order, and a board of directors nominated by the United Counties Council of Dundas, Stormont and Glengarry respectively. The sanatoria are self-governing. The Ontario Department of Health contributes towards the maintenance costs for each resident of Ontario

undergoing treatment in a sanatorium whose maintenance is not the responsibility of any other agency. The department pays to sanatoria the average costs of overhead, normal ward service, surgery, laboratory and dental departments. The government has a representative on each board of directors.

Prior to 1945 there were some 17 voluntary organizations selling Christmas seals, 12 of which were associated with sanatoria. All these groups operated independently of each other. The need for a central organization to act in a coordinating capacity and promote more efficient operation was recognized by the groups concerned, the Ontario Department of Health and the Canadian Tuberculosis Association. As a result, the Ontario Tuberculosis Association was incorporated under the Ontario Companies Act in 1945 as a non-profit corporation and became affiliated with the Canadian Tuberculosis Association. The policy established at that time was that funds raised from the sale of Christmas seals were to be used for the purpose of providing a free diagnostic service throughout the province.

There are now 107 local tuberculosis associations and committees affiliated with the Ontario Tuberculosis Association. These are divided into 13 geographic districts. As presently constituted the parent association is controlled by an executive council of 50 members elected annually by the district group on a proportional basis. Each year the executive council appoints a management committee from its members to administer the affairs of the association subject to the approval of the executive council. The officers of the association consist of a president and vice-president acting in a voluntary capacity as well as a full-time paid executive secretary.

A medical advisory committee consisting of six physicians was authorized by the executive council in 1949 to advise the association and its member groups on matters pertaining to the medical aspects of local and provincial programs as they concern the voluntary effort. Three of the members are appointed by the Sanatorium Superintendents Association, one by the Ontario Department of Health, one by the Ontario Public Health Association and one by the Ontario Medical Association.

The Ontario Tuberculosis Association is a federation of individual autonomous units receiving directions and advice from the executive council through the management committee and the executive secretary. Local associations are now being requested to enter into a yearly contract with the provincial association covering the distribution of funds raised by the individual units. The contract also makes provision for an annual audited financial statement to be sent to the central office of the association for each fiscal year ending March 31st. In addition, local committees also agree to prepare a budget for the ensuing year's activities.

Funds to operate the Ontario association

and its central office in Toronto are obtained from the following sources, -

- (a) Ontario Government grant of \$5,000.00 annually;
- (b) Annual assessment of the individual committees on the basis of 1/2 cent per capita for nonsanatorium committees and 75 cents per bed for sanatorium committees.

The budget for 1950 amounted to approximately \$ 15, 000.00.

Local committees purchase Christmas seal supplies and educational material from the Ontario Tuberculosis Association at cost. These are supplied by the Canadian Tuberculosis Association directly to the local groups in most instances, the provincial association acting as the financial and intermediary agent.

The 1949 Christmas seal sale campaign grossed approximately \$670,000 at an average operating cost of 18 per cent. This includes supplies, postage, advertising and secretarial help.

Local associations administer their own funds, out of which the following services are provided:

- (a) Free regular periodic chest examinations in over 130 different clinics throughout the province (hospital x-ray fee, secretarial help in some instances and cost of medical supervision except in those areas where the Ontario Department of Health gives a free service).
- (b) Free community x-ray surveys. The committees pay the Ontario Department of Health a survey fee of 30 cents per person x-rayed. This is the cost to the department of supplying equipment, materials, and staff for taking and interpreting the x-ray films. In addition the committees pay local organization costs of approximately six cent per person.
- (c) Free chest films for special groups such as school teachers, food handlers, applicants for employment in industry, tuberculin reactors among students. This particular program is not in general operation yet, but is being developed in many centres where local funds and x-ray facilities are available.
- (d) Educational material for the local department of health.
- (e) Financial assistance for in-patient

rehabilitation is now being provided by a number of local committees. Some local committees are engaged in rehabilitation of patients after discharge from sanatorium.

The National Sanitarium Association, Toronto is one of the 107 organizations affiliated with the Ontario Tuberculosis Association and sells Christmas seals in the Counties of York (including Toronto) and Simcoe as well as the Districts of Parry Sound and Muskoka. These funds are used to operate the Gage Institute, which provides a comprehensive free diagnostic service at its Toronto headquarters. In addition, the Gage Institute also conducts community x-ray surveys throughout the National Sanitarium Association Christmas seal districts, two mobile x-ray survey units being used for this pur-

pose. The entire cost of these surveys is paid out of Christmas seal funds.

This same source of revenue also provides a free regular periodic chest clinic service in a number of centres in Simcoe County as well as in the Districts of Muskoka and Parry Sound, clinical supervision being given by the Muskoka Hospital, Gravenhurst, one of the two sanatoria operated by the National Sanitarium Association.

The Niagara Peninsula Sanatorium, St. Catharines, also has a mobile x-ray survey unit and conducts surveys, chiefly confined to industrial and other special groups in the Counties of Lincoln, Welland and Haldimand. This is a free service, the cost being paid out of Christmas seal funds collected by the sanatorium association.

CHAPTER III

PREVENTION AND DIAGNOSTIC FACILITIES

The Role of the Family Physician

The general practitioner may participate in the campaign for the control of tuberculosis in the following ways, -

- (a) He is required to notify the local department of health of all cases.
- (b) He may avail himself of facilities of the various chest clinics.
- (c) He may attend medical meetings where tuberculosis is under discussion and avail himself of the ever-increasing and latest knowledge in the diagnosis and treatment of tuberculosis.
- (d) He may persuade active cases to have sanatorium treatment.
- (e) He can cooperate with the various agencies combining in the campaign against tuberculosis.

It has been suggested that the following measures would increase the interest of practicing physicians.

Physicians in general practice should be members of local tuberculosis associations and be represented on their executive boards. Representatives should be changed every few years. Medical societies should be notified of any plans such as community chest x-ray surveys, asking their co-operation before putting them in operation. Physicians in general practice should be kept informed of the newer methods of diagnosis and treatment. Physicians should be invited to be present where final physical examinations are made in clinics. Voluntary associations could assist by gifts of technical literature on tuberculosis to new physicians located in the country or community. Every physician should be provided with a copy of "Diagnostic Standards" the official publication of the National Tuberculosis Association.

Medical societies should hold regular meetings at a sanatorium in the vicinity. This brings a large number of doctors to the sanatorium for medical papers and demonstrations. Movie films on tuberculosis could be presented at general medical meetings. Tuberculin testing should be encouraged in every possible way and when tuberculin surveys are made all positive reactors should be followed. Physicians should be induced to attend short post-graduate courses at specified institutions, to learn

the latest progress in diagnosis of chest diseases.

Postgraduate education of doctors should be encouraged by means of scholarships in tuberculosis, for example, scholarships of \$500.00 a year to enable young doctors to spend a few hours per week in chest clinics. They would have an awareness of tuberculosis problems as well as general medical problems. Medical schools should give sufficient hours to the teaching of tuberculosis. Physicians should be available to give talks to lay audiences and other groups. A proportion of public funds should be allotted for the training of personnel in tuberculosis hospitals, including administration officers.

Role of the Chest Consultant

The chest consultant should have adequate training in general medicine, together with special training of sufficient length of time in all diseases of the chest, including sanatorium experience. Long experience is required in many cases to evaluate procedure in treatment.

If the consultant is on the staff of a teaching hospital, it should be his duty to see that the teaching of tuberculosis to undergraduates is adequate and that it is made interesting. Tuberculosis could be used as a medium to teach the social side of medicine. The undergraduate should be given a comprehensive picture of tuberculosis as a medical, social and public health problem.

The consultant might be invited to advise in the general policy in connection with community chest surveys.

One of the consultant's most valuable contributions is to aid the referring physician by persuading the patient that sanatorium treatment offers the best opportunity for the cure of his or her disease.

Extent of Mass Surveys

In a mass tuberculosis survey, one locality is selected (usually a municipality) and an effort is made to secure a chest film of every resident in the locality. The object of such a survey is to discover cases of tuberculosis in order that they may be properly treated.

Table G1 contains a summary of the findings for the period, 1942 to 1948.

TABLE G1

MASS SURVEYS CONDUCTED JOINTLY BY THE DIVISION OF TUBERCULOSIS
PREVENTION, ONTARIO DEPARTMENT OF HEALTH, AND THE ONTARIO
TUBERCULOSIS ASSOCIATION - 1942 TO 1948 INCLUSIVE

1. <u>Total number x-rayed</u>		1,242,772	
	<u>Cases</u>	<u>Per cent</u>	
No evidence of disease or abnormality	1,216,041	97.84	
Pulmonary tuberculosis (active & inactive)	5,957	0.48	
Pleurisy with effusion	15	0.00	
Extra pulmonary active	3	0.00	
Other abnormal chest conditions	20,756	1.67	

2. <u>Classification of pulmonary tuberculosis:</u>				
	<u>Active</u>	<u>Activity Questionable</u>	<u>Inactive</u>	<u>TOTAL</u>
Minimal	496	417	3,131	4,044
Moderately advanced	414	207	982	1,603
Far advanced	<u>138</u>	<u>13</u>	<u>159</u>	<u>310</u>
	1,048	637	4,272	5,957

3. <u>Active tuberculosis:</u>		
	<u>Cases</u>	<u>Per cent</u>
(a) Pulmonary		
Minimal	496	46.26
Moderately advanced	414	38.98
Far advanced	138	13.06
(b) Extra pulmonary	3	0.28
(c) Pleurisy with effusion	<u>15</u>	<u>1.42</u>
	1,066	100.00

4. <u>Number of cases per 1,000 persons x-rayed:</u>				
	<u>Active</u>	<u>Activity Questionable</u>	<u>Inactive</u>	<u>TOTAL</u>
	0.82	0.48	3.3	4.6

TABLE G2
SUMMARY OF CHEST X-RAY FILMS TAKEN 1942 - 1949

Mass Surveys		
Division of Tuberculosis Prevention.....	1, 500, 155	
Division of Industrial Hygiene	230, 141	
Gage Institute, Toronto (1946 - 1949).....	770, 359	
Niagara Peninsula Sanatorium (1948 - 49).....	± 40, 000	
May Court Clinic, Ottawa	± 10, 000	2, 550, 6±5
Permanent chest clinics		± 713, 691
Hospital admissions (mostly 1949)		± 107, 000
TOTAL		3, 371, 346

± approximate

TABLE G3
COMMUNITY X-RAY SURVEYS
 PROVINCIAL DEPARTMENT OF HEALTH 1945 to 1949
 GAGE INSTITUTE 1947 to 1949
INDIAN HEALTH SERVICES 1948 and 1949

Estimated available population to be surveyed	3, 274, 300
Number x-rayed	1, 542, 937
Significant pulmonary tuberculosis (active and act. questionable)	1, 919
Significant pulmonary tuberculosis per 1, 000 examined	1. 2
Active pulmonary tuberculosis reported	1, 090
Active pulmonary tuberculosis per 1, 000 examined	0. 7
Estimated total significant cases pulmonary tuberculosis.....	4, 279
Estimated total number active pulmonary tuberculosis.....	2, 295

TABLE G4

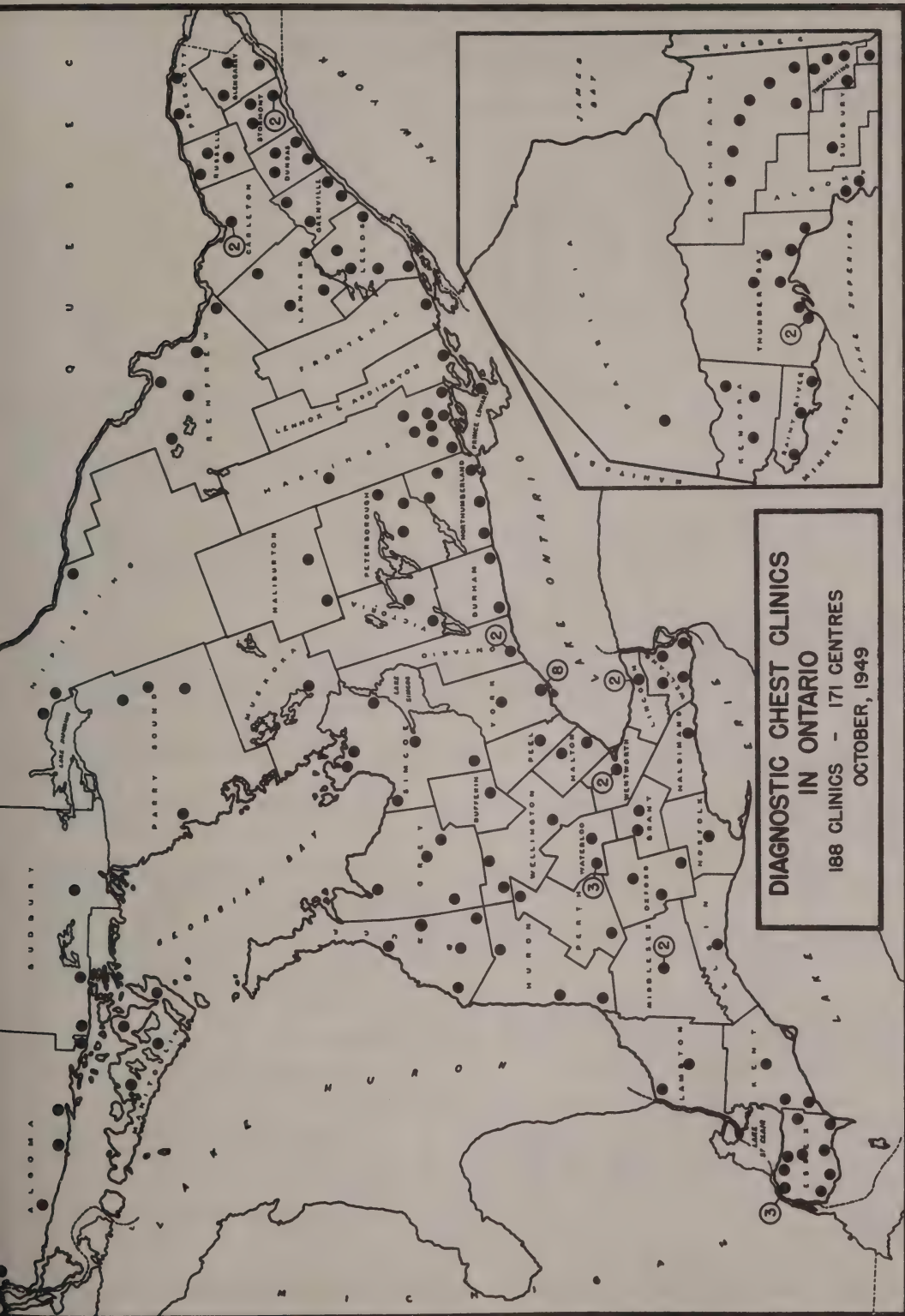
METHOD OF FINANCING CHEST CLINICS
PROVINCE OF ONTARIO
APRIL 1, 1950

Number of Clinics	193
Number of Centres	176
	<u>No. of Clinics</u>
Local Christmas seal associations pay full cost (x-rays and clinic supervision)	95
Local Christmas seal association pays for x-rays and clerical help. Free medical supervision supplied by the Provincial Department of Health	37
Departmental travelling chest clinics - free	50
Municipality pays full cost (City of Windsor chest clinic)	1
Municipality and Christmas seal committees share full cost (Hamilton and London)	3
Patients pay, if possible, x-ray and clinic fee City of Toronto hospital clinics	7

TABLE G5

NUMBER OF ACTIVE CASES OF PULMONARY TUBERCULOSIS
DISCOVERED BY PERMANENT PERIODIC CLINICS IN 1948

Clinics staffed by Department	172
Clinics staffed by sanatoria	527
Others - including Toronto hospital clinics, Kirkland Lake, etc.	110
Gage Institute	354
TOTAL:	1,163



Prepared by the Division of Tuberculosis Prevention, Ontario Department of Health.

TABLE G6

INCIDENCE OF ACTIVE TUBERCULOSIS IN
INDUSTRIAL SURVEYS 1942 to 1949

Year	Number x-rayed	Active cases per 1,000 examined.
1942	31,113	2.80
1943	48,127	2.66
1944	44,966	2.25
1945	17,639	2.00
1946	13,141	0.18
1947	24,249	0.98
1948	26,755	1.44
1949	24,151	0.56
TOTAL	230,141	

Looking at Table G2, it will be seen that in the years 1942 to 1949, a total of 2,550,655 chest films were taken in these mass surveys.

The results of the mass surveys are shown in table G3. It will be observed that there were 1,919 cases of "significant pulmonary tuberculosis" or 1.2 per 1,000 of those examined. There were 1,090 cases suffering from active pulmonary tuberculosis or .7 per 1,000 of those examined.

These figures permit the deduction that the community mass x-ray surveys continue to reveal a considerable number of persons suffering from active pulmonary tuberculosis and that the effort devoted to the surveys is well worthwhile and should be continued.

Distribution of Permanent Clinics with Method of Operation and Financing

The distribution of the permanent chest clinics is shown in Map G1.

The method of financing the chest clinics is shown in Table G4.

The number of active cases of pulmonary tuberculosis discovered in the permanent clinics in 1948 is given in Table G5.

There are diagnostic chest clinics throughout the province. No charge is made to the patients in these clinics with the exception of the seven clinics operated in hospitals in the city of Toronto.

The extent of the services performed in these clinics is illustrated by reference to Table G2, wherein it will be seen that during the years 1942 to 1949, 713,691 chest films were taken in the permanent clinics.

Industrial Surveys

Since the year 1942, the Division of Industrial Hygiene has conducted mass x-ray surveys

using miniature film in the industrial plants in Ontario. During this time 230,141 people have been x-rayed. Since 1946 the work has been confined largely to plants containing a silica hazard. The incidence of active tuberculosis has varied considerably from year to year as shown by Table G6.

Although there appears to have been a downward trend in active cases found, the variation shown in the last four years indicates that several more years of observation are needed to confirm this trend.

In the last three years a large number of cases of silicosis not previously known to the Workmen's Compensation Board have been uncovered and in many instances compensation was recommended.

Examination of Patients upon Admission to Public General Hospital

Map G2 and Table G7 show the development of this program in Ontario as of October 1949.

Some figures respecting the findings in the hospital chest x-ray examinations are given in Table G8. The table deals with a six month period in which 38,963 persons were x-rayed. It will be seen that the value of this service is not limited to diagnosis of tuberculosis. This x-ray procedure revealed other abnormalities in 12.07 per cent of the patients examined.

Care of Immigrants

Some immigrants enter Canada under the following categories, -

- (a) displaced persons brought to Canada by the Federal Department of Labour; and
- (b) immigrants sponsored by relatives and friends.

The only information the Federal Department of Citizenship and Immigration has regarding

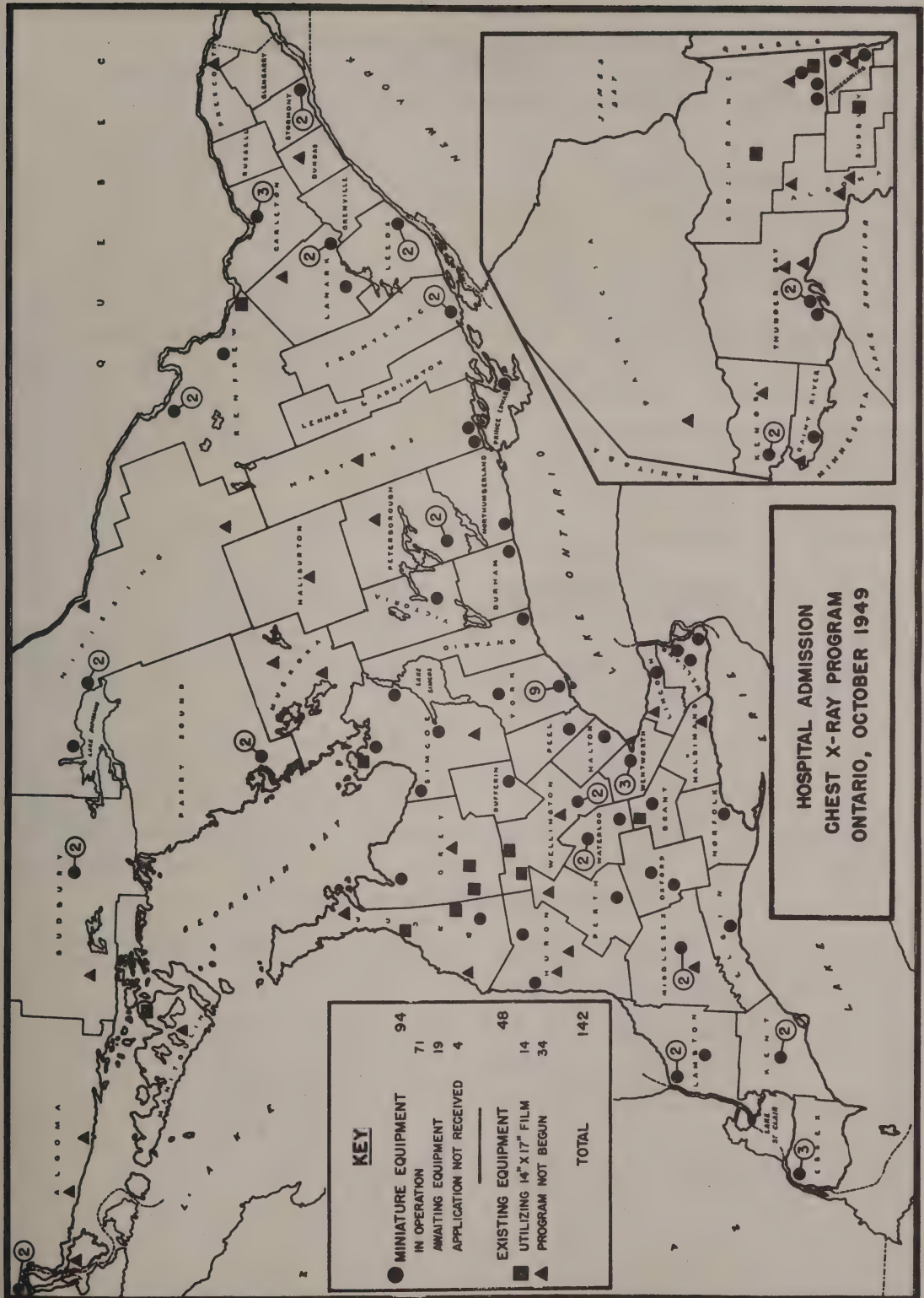


TABLE G7

HOSPITAL ADMISSION CHEST X-RAY PROGRAM
OCTOBER - 1949

Hospitals considered suitable for special equipment		94
	<u>Hospitals</u>	<u>Per cent</u>
Equipment installed	71	75.5
Equipment ordered	15	15.9
Application approved - choice of equipment not yet made	4	4.3
Application not yet received	4	4.3
	94	100.0
Small hospitals - special equipment not indicated		48
14" X 17" admission films being taken in	14	29.2

TABLE G8

HOSPITAL ADMISSION CHEST X-RAY PROGRAM - ONTARIO
REPORT OF FINDINGS FOR SIX MONTH PERIOD OCTOBER, 1949

Diagnostic Impression	Number	Percentage
No significant pathology	33,457	85.87
Tuberculosis suspect	206	0.53
Probably active	71	0.18
Activity undetermined	137	0.35
Probably inactive	301	0.77
Pleural effusion	88	0.23
Other abnormalities	4,703	12.07
	38,963	100.00
CLASSIFICATION OF OTHER ABNORMALITIES		
Diagnostic Impression	Number	Percentage
Cardiovascular abnormalities	1,959	5.03
Pneumonia	538	1.38
Bronchiectasis	118	0.30
New growth	66	0.17
Undiagnosed pulmonary lesion	234	0.60
Other abnormalities	1,788	4.59
	4,703	12.07

N.B. The above percentages are based on total patients x-rayed - 38,963

TABLE G9
TUBERCULOSIS IN IMMIGRANTS

	Under Treatment	Discharged	TOTAL
Displaced persons	28	18	46
Sponsored immigrants	31	16	47

the destination of immigrants sponsored by friends and relatives is the address of such sponsors. Investigation shows that by far the greater percentage of these immigrants is now located elsewhere than the original address of the sponsor. This is due to the fact that they seek employment wherever it may be obtained. It is, therefore, difficult to secure the permanent addresses of these people except through the sponsors. In their efforts to secure employment they often travel quite widely and in such instances it is usually impossible to keep track of them.

The value of having all immigrants receive a periodic chest film is apparent, but the lack of a permanent address makes this difficult. A notice might be inserted in the passport of each immigrant, at the port of entry, pointing out the desirability of a periodic chest film and stating a free chest film could be obtained in say three or six months, by applying to the local or provincial department of health. Apparently immigrants read the material in their passports quite closely and such a notice would receive their attention.

Table G9 shows the number of displaced persons and sponsored immigrants (European countries outside the United Kingdom) in Ontario sanatoria as well as those who have been discharged at the date of this report.

Examination of Nurses

The regulations for examination of nurses are contained in the regulations under The Sanatoria for Consumptives Act, regulations 6 to 16 and the regulations under the Public Hospitals Act, regulations 65 to 73(b).

These regulations are designed to protect nurses and other employees in hospitals and sanatoria who, in the course of their employment, are exposed to patients suffering from tuberculosis.

Regulations Regarding Chest Films on Teachers and Teachers-in-training.

There are no regulations respecting x-ray films for teachers but the local board of education may require chest films of teachers when the teacher enters employment or at intervals thereafter.

Teachers-in-training are required by the Ontario Department of Education to receive chest films upon entering Normal School or the College of Education.

Pre-employment Examination of Certain Occupational Groups.

The committee has enquired into the subject of requiring an examination of persons employed in occupations where they are likely to spread tuberculosis if they are suffering from this disease in a communicable state. This would apply to persons engaged in serving food to the public. The regulations respecting eating establishments made under the authority of the Public Health Act contain procedures relating to examination of food handlers. These regulations authorize the local medical officer of health to take any necessary action respecting such examinations. The regulations do not specify that there must be an x-ray of the chest but the medical officer of health has authority to require such an examination.

The Use of BCG Vaccine.

The division of tuberculosis prevention of the Ontario Department of Health provides BCG vaccine without charge upon requisition of physicians, hospitals and sanatoria and recommends its use in those occupationally exposed to tuberculosis such as internes, medical students, nurses, hospital attendants and in households where an open case exists.

CHAPTER IV

TREATMENT FACILITIES

This chapter contains information respecting the facilities for the hospital treatment of persons suffering from tuberculosis. These facilities are provided in 14 special hospitals known as sanatoria, the location of which is shown in Map G3. It will be noted that there are 3,941 beds in these 14 sanatoria. In addition there are 600 beds in the Ontario Hospital, Woodstock which is a special institution for mentally ill persons suffering from tuberculosis.

Distribution and Bed Capacity of Sanatoria and Beds in Public General Hospitals

In addition to Map G3 reference should also be made to Chart G2 which shows an increase in sanatoria beds from 2,243 in 1930 to 3,941 in 1948. The same chart shows an increase in patients from 3,984 in 1930 to 6,517 in 1948.

Table G10, which was compiled from information from the Division of Tuberculosis Prevention of the Ontario Department of Health on February 18, 1950, shows that there is, on the whole, very little delay in obtaining admission of patients to sanatoria.

Map G4 and Table G11 portray the residence of the patients in the various sanatoria.

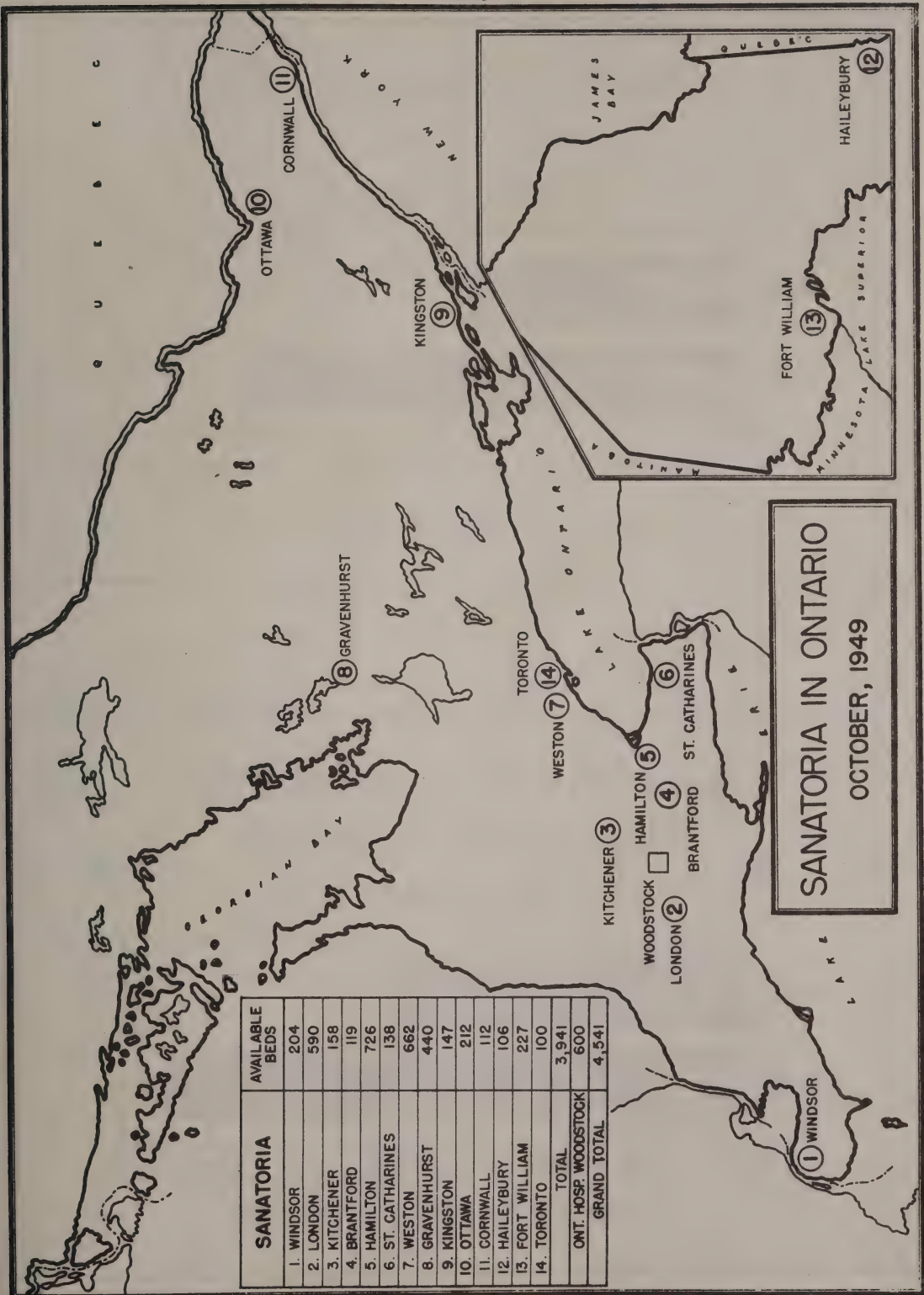
Tables G12 to G16 give detailed information respecting the sanatorium beds.

Adequacy of Existing Accommodation

The information amassed by the committee suggests certain conclusions with respect to the adequacy or otherwise, of the existing accommodation in sanatoria.

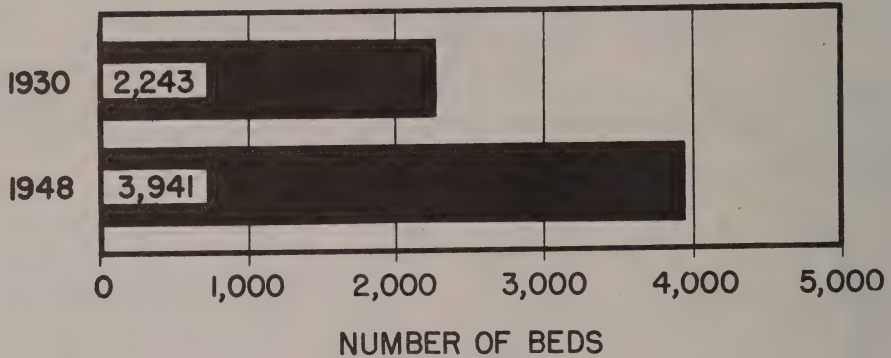
TABLE G10
WAITING LISTS OF ONTARIO SANATORIA IN 1949

	January	April	July	October	December
Brantford	7-10 days	7-10 days	7-10 days	0	0
Cornwall	M 0 F 0	M 0 F 7	M 14 days F 0 days	M 0 F 0	M 0 F 0
Fort William	No report as yet - urgent cases admitted almost at once - no waiting list now.				
Gravenhurst	2-3 weeks	2-3 weeks	0	0	0
Haileybury	M 3-4 weeks F 2 weeks	M 6 weeks F 2 weeks	M 4 weeks 0	M 4 weeks 0	0 0
Hamilton	1-3 weeks	1-3 weeks	0	0	1-3 weeks
Kingston	0	1 week	1 week	1 week	0
Kitchener	0	2 weeks	2 weeks	0	2-4 weeks
London	8 days	11 days	10 days	9 days	9 days
Ottawa	2-3 months	1 month	1 month	2-3 months	2-3 months
St. Catharines	Urgent cases admitted almost immediately; others wait 4-6 weeks				
Weston	Males wait an average of 44 days and females 14 days.				
Windsor	Less than a week throughout the year.				



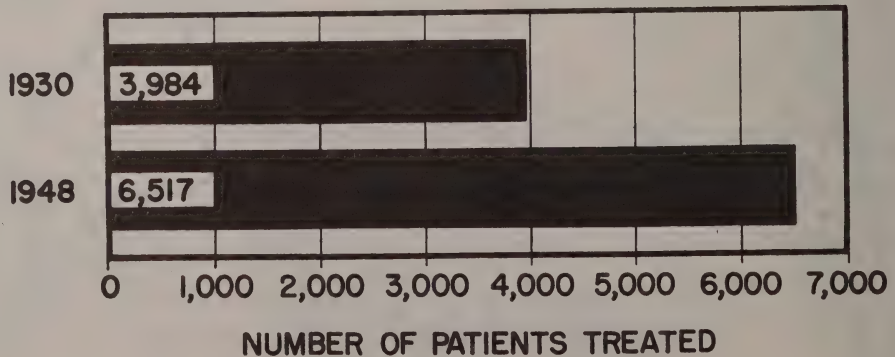
NUMBER OF SANATORIUM BEDS IN ONTARIO

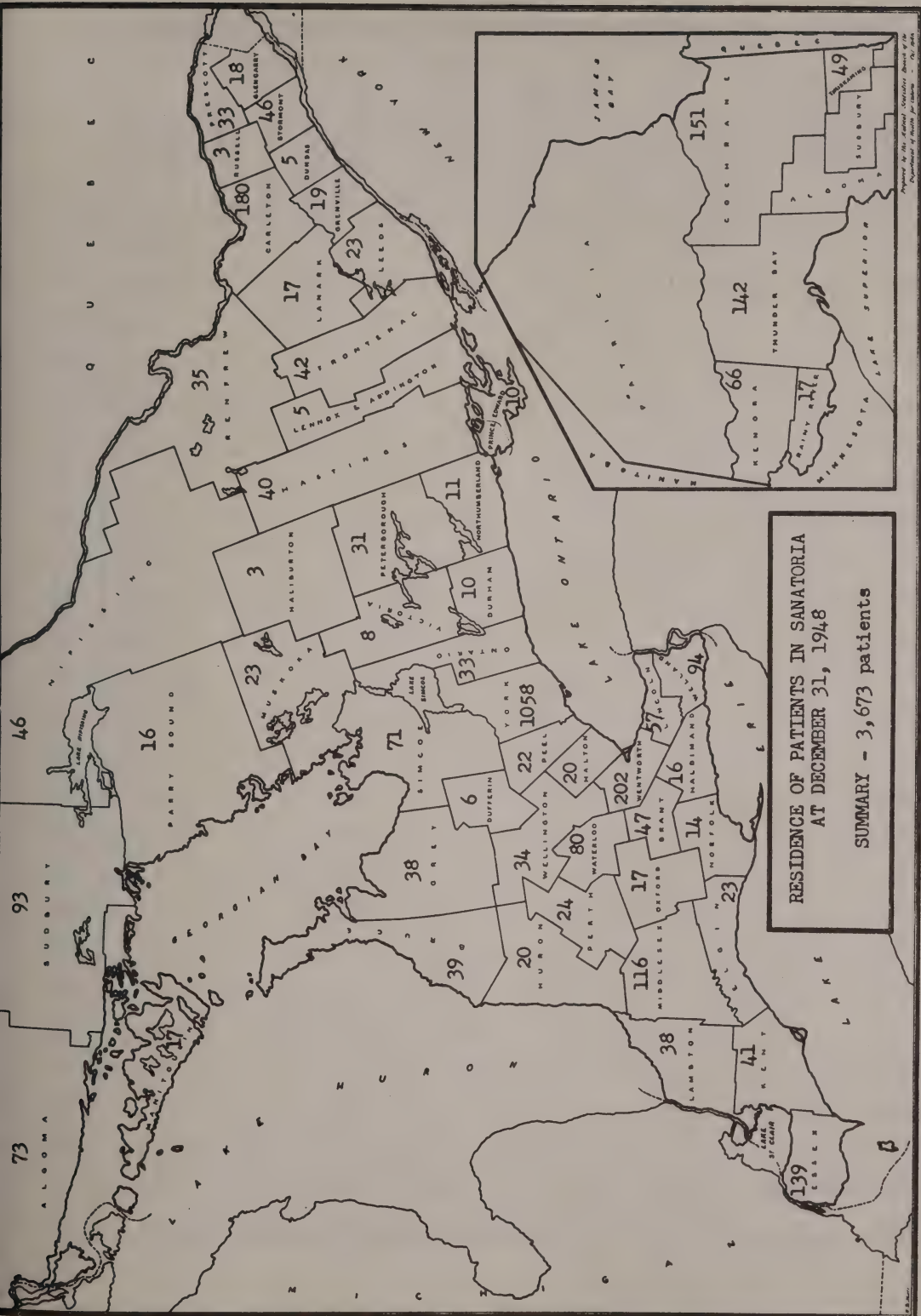
1930 & 1948



NUMBER OF PATIENTS TREATED IN SANATORIA IN ONTARIO

1930 & 1948





RESIDENCE OF PATIENTS IN SANATORIA
AT DECEMBER 31, 1948

SUMMARY - 3,673 patients

Residents of the following cities included in County totals: Ottawa 153, Windsor 105, London 86, Hamilton 187, Toronto 829, Sudbury 43, Fort William 35, Fort Arthur 26. Other provinces 59, nonresidents 23, without municipal residence 110.

TABLE G11
RESIDENCE OF ALL PATIENTS IN ONTARIO SANATORIA AS OF DECEMBER 31, 1948

COUNTY OR DISTRICT OF RESIDENCE	SANATORIA														TOTAL
	HAMILTON	WESTON	LONDON	GRAVENHURST	FORT WILLIAM	OTTAWA	WINDSOR	KITCHENER	ST. CATHARINES	BRANTFORD	CORNWALL	HAILEYBURY	KINGSTON	TORONTO (Preventorium)	
Algoma	10	16	8	10	2	0	12	0	0	4	0	9	0	2	73
Brant	16	1	2	0	0	0	0	2	0	25	0	0	0	1	47
Bruce	4	5	20	3	0	0	1	6	0	0	0	0	0	0	39
Carleton	7	1	6	1	0	149	1	0	0	1	3	1	10	0	180
Cochrane	16	28	26	30	5	1	5	1	0	2	0	36	0	1	151
Dufferin	2	2	0	0	0	0	0	2	0	0	0	0	0	0	6
Dundas	1	1	0	0	0	0	0	0	0	0	3	0	0	0	5
Durham	2	3	1	2	0	0	1	0	0	1	0	0	0	0	10
Elgin	0	0	23	0	0	0	0	0	0	0	0	0	0	0	23
Essex	1	1	9	3	0	0	125	0	0	0	0	0	0	0	139
Frontenac	2	1	1	0	0	1	1	0	0	0	0	0	36	0	42
Glengarry	0	1	5	0	0	1	0	0	0	0	10	0	1	0	18
Grenville	1	0	1	0	0	3	0	0	0	1	9	0	4	0	19
Grey	8	2	8	4	0	0	2	13	0	1	0	0	0	0	38
Haldimand	10	1	0	0	0	0	0	0	5	0	0	0	0	0	16
Haliburton	0	0	1	2	0	0	0	0	0	0	0	0	0	0	3
Halton	12	4	2	0	0	0	0	1	0	0	0	0	0	1	20
Hastings	9	0	7	7	0	0	0	1	1	0	2	0	13	0	40
Huron	0	0	18	0	0	0	0	1	1	0	0	0	0	0	20
Kenora	0	0	0	0	65	0	1	0	0	0	0	0	0	0	66
Kent	0	0	34	0	0	0	7	0	0	0	0	0	0	0	41
Lambton	1	0	35	0	0	0	2	0	0	0	0	0	0	0	38
Lanark	1	1	2	3	0	3	0	0	0	0	3	0	4	0	17
Leeds	1	3	3	0	0	0	0	0	0	1	3	0	12	0	23
Lennox & Addington	0	0	1	2	0	0	0	0	0	0	0	0	2	0	5
Lincoln	7	1	0	1	0	0	0	0	46	1	0	0	0	1	57

TABLE G11 (Cont'd)

RESIDENCE OF ALL PATIENTS IN ONTARIO SANATORIA AS OF DEC. 31, 1948

COUNTY OR DISTRICT OF RESIDENCE	S A N A T O R I A														TOTAL
	HAMILTON	WESTON	LONDON	GRAVENHURST	FORT WILLIAM	OTTAWA	WINDSOR	KITCHENER	ST. CATHARINES	BRANTFORD	CORNWALL	HAILEYBURY	KINGSTON	TORONTO (Preventorium)	
Manitoulin	1	3	2	8	0	0	0	0	0	0	0	2	0	0	17
Middlesex	2	1	109	0	0	0	1	1	0	2	0	0	0	0	116
Muskoka	0	4	0	19	0	0	0	0	0	0	0	0	0	0	23
Nipissing	3	3	2	29	0	1	1	0	0	1	0	4	1	1	46
Norfolk	8	0	3	0	0	0	0	0	0	3	0	0	0	0	14
Northumberland	2	2	3	3	0	0	0	0	0	1	0	0	0	0	11
Ontario	5	6	4	11	0	0	1	1	0	2	0	0	0	3	33
Oxford	1	1	14	0	0	0	0	0	0	1	0	0	0	0	17
Parry Sound	1	1	1	10	0	0	0	1	0	0	0	1	0	1	16
Peel	8	9	0	1	0	0	0	1	0	2	0	0	1	0	22
Perth	0	1	21	0	0	0	0	2	0	0	0	0	0	0	24
Peterborough	7	5	4	12	0	0	0	0	0	0	0	0	3	0	31
Prescott	0	0	2	2	0	22	0	0	0	0	7	0	0	0	33
Prince Edward	0	0	2	1	0	0	0	0	0	0	0	0	7	0	10
Rainy River	0	0	0	0	17	0	0	0	0	0	0	0	0	0	17
Renfrew	6	1	1	7	0	10	0	0	0	0	3	5	2	0	35
Russell	0	0	0	1	0	1	0	0	0	0	1	0	0	0	3
Simcoe	3	16	1	48	0	0	0	0	0	0	0	0	1	2	71
Stormont	2	0	2	0	0	1	0	0	0	1	40	0	0	0	46
Sudbury	17	9	8	39	4	0	5	0	0	4	0	6	0	1	93
Thunder Bay	5	1	3	1	127	0	3	0	0	1	0	1	0	0	142
Temiskaming	8	4	8	8	0	0	2	0	0	0	0	19	0	0	49
Victoria	1	0	0	6	0	0	0	0	0	0	0	0	1	0	8
Waterloo	2	3	3	0	0	0	0	69	0	1	0	0	0	2	80
Welland	13	3	0	0	0	0	0	0	76	2	0	0	0	0	94

TABLE G11 (Cont'd)
RESIDENCE OF ALL PATIENTS IN ONTARIO SANATORIA AS OF DEC. 31, 1948

COUNTY OR DISTRICT OF RESIDENCE	S A N A T O R I A														TOTAL
	HAMILTON	WESTON	LONDON	GRAVENHURST	FORT WILLIAM	OTTAWA	WINDSOR	KITCHENER	ST. CATHARINES	BRANTFORD	CORNWALL	HAILEYBURY	KINGSTON	TORONTO (Preventorium)	
Wellington	3	1	4	0	0	0	0	26	0	0	0	0	0	0	34
Wentworth	198	0	1	1	0	0	2	0	0	0	0	0	0	0	202
York	254	451	101	117	0	0	7	19	3	32	1	0	6	67	1,058
TOTAL FOR ALL COUNTIES AND DISTRICTS	661	597	512	392	220	193	180	147	132	90	85	84	104	84	3,481

Table G13 shows an increase in sanatorium beds from 3,595 in 1939 to 3,841 in 1948. (This figure does not include the 100 beds in the I.O.D.E. Children's Preventorium, Toronto.) Table G15 shows that in 1948, there was an average daily occupancy of 95.3 per cent. From these tables it would appear that the accommodation in sanatoria is being used almost to capacity. In the absence of other considerations it might be deduced from these tables that an increase of bed capacity in sanatoria might be necessary.

Other factors, however, were considered by the committee. There is a marked decline in the death rate shown in Chart G1. This decline, especially in recent years, has not been paralleled by a similar decrease in incidence. Most important is the information in Table G10, that on the whole, there is very little delay in obtaining admission of patients to sanatoria. The prospect of a continuing increase in the population will also tend to maintain the current demand for beds.

In view of this information, the committee is of the opinion that any theoretical estimate of the number of sanatorium beds required in Ontario would be of little value. The Ontario Department of Health from its information relating to the incidence of tuberculosis and the known occupancy at the various sanatoria, is competent to decide when and where additional bed capacity should be provided.

The committee concurs in the recommendation of the Department of Health for the construction of a sanatorium at Sudbury to accommodate 140 patients and consideration of an additional 100 beds at Weston sanatorium.

Staff of Sanatoria Including Number, Qualifications and Salary Scale

Particulars of the number of each type

of employee in sanatoria are given in Table G17.

Treatment Facilities in Sanatoria and Distribution of Surgical or Other Special Units

The four largest sanatoria located at Hamilton, Weston, London, and Gravenhurst have surgical units. Major surgery is also done in the sanatoria at Ottawa, Fort William, Windsor and Kingston General Hospital.

Capital and Maintenance Costs of Sanatoria

Information relating to the financial operations of sanatoria are contained in Tables G18 and G19. Table G19 in particular, shows the per capita costs in each sanatorium and the average per capita costs for all sanatoria for 1948.

For the calendar year ending December 31, 1948, the province paid \$4,192,123 toward the cost of maintaining patients in sanatoria and patients paid \$161,084. In other words, patients contributed toward their maintenance only 3.8 per cent of the amount contributed by the province. In view of the comparatively small amount which is being collected from patients, consideration might well be given to abolishing all charges from patients, thus removing any financial obstacle in the way of treatment.

Compensation for Employees of Hospitals and Sanatoria

The committee has noted that arrangements have been completed in 1950 through the Workmen's Compensation Board of Ontario for the compensation of persons who contract tuberculosis in the course of their employment in hospitals and sanatoria. It is therefore unnecessary for the committee to put forward recommendations covering this subject.

TABLE G12

**DEATH RATE IN ONTARIO PER 100,000 POPULATION FROM ALL TYPES OF TUBERCULOSIS
WITH SANATORIUM BEDS PER DEATH - 1939 to 1948**

Year	Death Rate Per 100, 000	Total Number of Deaths	*Number of Sanatorium Beds	Number of Beds Per Death
1939	28.9	1,085	3,595	3.31
1940	26.9	1,011	3,624	3.58
1941	29.0	1,100	3,647	3.32
1942	28.2	1,093	3,624	3.32
1943	28.1	1,101	3,582	3.25
1944	26.9	1,068	3,640	3.41
1945	25.3	1,015	3,656	3.60
1946	25.7	1,059	3,642	3.44
1947	24.9	1,042	3,735	3.58
1948	19.2	825	3,841	4.67

*Does not include tuberculosis unit of 600 beds operated by the provincial government in conjunction with the mental hospitals.

TABLE G13

****BED COMPLEMENT OF SANATORIA IN ONTARIO (ADULTS AND CHILDREN)
AT END OF HOSPITAL YEARS - 1939 to 1948**

LOCATION	1939	1940	1941	1942	1943	1944	1945	1946	1947	1948
Hamilton	702	730	730	720	720	720	720	720	720	726
Weston	676	668	660	655	606	656	664	661	662	662
London	611	611	611	611	611	611	611	595	600	590
Gravenhurst	440	440	440	440	440	440	440	440	440	440
Fort William	187	184	194	194	196	197	198	200	200	227
Ottawa	210	212	212	212	212	212	212	212	212	212
Windsor	168	171	190	180	185	185	185	185	200	204
Kitchener	148	148	148	150	150	156	156	158	158	158
St. Catharines	86	86	88	88	89	90	90	90	141	138
Brantford	102	109	109	109	108	108	115	117	118	119
Cornwall	112	112	112	112	112	112	112	112	112	112
Haileybury	106	106	106	106	106	106	106	105	105	106
Kingston	47	47	47	47	47	47	47	47	47	147
TOTAL	3,595	3,624	3,647	3,624	3,582	3,640	3,656	3,642	3,735	3,841*

*1948 figure does not include 100 beds in I. O. D. E. Children's Preventorium, Toronto

**Does not include tuberculosis unit of 600 beds operated by the provincial government in conjunction with the mental hospitals.

TABLE G14

CLASSIFICATION OF BED COMPLEMENT IN ONTARIO SANATORIA AS OF DECEMBER 31, 1948

Location	One-bed Wards		Two-bed Wards		3 or More Bed Wards		Children's Beds		All Beds		GRAND TOTAL
	Infirmery	Pavilion	Infirmery	Pavilion	Infirmery	Pavilion	Infirmery	Pavilion	Infirmery	Pavilion	
Hamilton	43	-	62	-	422	144	55	-	582	144	726
Weston	176	-	58	-	293	33	102	-	629	33	662
London	106	-	142	14	219	85	24	-	491	99	590
Gravenhurst	110	23	34	10	195	68	-	-	339	101	440
Fort William	28	-	20	-	153	-	26	-	227	-	227
Ottawa	7	14	42	24	60	30	26	9	135	77	212
Windsor	47	-	64	-	93	-	-	-	204	-	204
Kitchener	13	-	40	-	99	-	6	-	158	-	158
St. Catharines	25	-	18	-	95	-	-	-	138	-	138
Brantford	15	-	18	-	66	20	-	-	99	20	119
Cornwall	12	-	20	-	80	-	-	-	112	-	112
Haileybury	3	-	45	-	52	-	6	-	106	-	106
Kingston	39	-	4	-	104	-	-	-	147	-	147
TOTAL	624	37	567	48	1,931	380	245	9	3,367	474	3,841

TABLE G15

AVERAGE DAILY OCCUPANCY OF BED COMPLEMENT OF SANATORIA
IN ONTARIO DURING THE YEAR 1948

LOCATION	Average Daily No. Patients in Residence (Ex- cluding infants)	Average Daily Bed Complement (Excluding bassinets)		Average Daily No. of Beds Available for Occupancy	
		Number	Percentage of Occupancy	Number	Percentage of Occupancy
Hamilton	724.4	726.0	98.8	726.0	98.8
Weston	598.1	662.0	90.4	631.5	94.7
London	558.8	599.3	93.2	599.3	93.2
Gravenhurst	414.5	440.0	94.2	440.0	94.2
Fort William	213.1	222.6	95.7	222.6	95.7
Ottawa	203.0	212.0	95.8	212.0	95.8
Windsor	194.6	204.0	95.4	202.7	96.0
Kitchener	157.9	158.0	99.9	158.0	99.9
St. Catharines	131.3	138.0	95.1	138.0	95.1
Brantford	109.3	118.3	92.4	118.3	92.4
Cornwall	102.1	112.0	91.2	112.0	91.2
Haileybury	99.1	106.0	93.5	106.0	93.5
Kingston	68.1	85.6	79.5	85.6	79.5
TOTAL	3,574.3	3,783.8	94.5	3,752.0	95.3

TABLE G16

OCCUPANCY AND WAITING LISTS OF ONTARIO SANATORIA, 1947 AND 1948

LOCATION	1947		1948	
	Average Number Waiting for Admission	Average Per- centage of Beds Occupied	Average No. Waiting for Admission	Average Per- centage of Beds Occupied
Hamilton	40	97.4	38	98.8
Weston	70	77.4	78	90.4
London	26	91.8	27	93.2
Gravenhurst	12	91.5	14	94.2
Fort William	25	95.6	29	95.7
Ottawa	54	94.4	27	95.8
Windsor	4	98.6	7	95.4
Kitchener	4	97.6	7	99.9
St. Catharines	36	98.0	20	95.1
Brantford	4	90.6	2	92.4
Cornwall	1	89.0	5	91.2
Haileybury	4	93.7	4	93.5
Kingston	2	95.9	-	79.6
TOTAL	282	90.4	258	94.5

TABLE G17

ONTARIO SANATORIA PERSONNEL AS OF DECEMBER 31, 1948

TYPE OF EMPLOYEE	Hamilton	Weston	London	Gravenhurst	Fort William	Ottawa	Windsor	Kitchener	St. Catharines	Brantford	Cornwall	Kingston	TOTAL
Physicians (Clinical)	-	-	-	-	-	2-1/2	-	-	1	-	-	-	3-1/2
Part time	18	11	10	7	3	3	3	3	4	2	2	3	69
Full time	-	3	-	-	1	1	1	-	-	-	-	1	7
Internes	-	-	-	-	-	-	-	-	-	-	-	-	-
Nurses	78	88	56	34	5	35-1/2	16	20-1/3	20	11-1/2	8	15	387-1/3
Graduate	87	96	95	54	34	18	24	14	9	10	14	16	471
Other	-	-	-	-	-	-	-	-	-	-	-	-	-
Pathologists	1	2	1	-	-	-	-	-	-	-	-	1	5
Path. Technicians	10	7	5	2	-	1	1	1/3	2	1	-	-	29-1/3
Radiologists	-	1	1/2	-	-	-	-	-	-	-	-	-	1-1/2
Rad. Technicians	1	1	1	1	1	1	1	1/3	3	-	1	1	12-1/3
Dentists	-	-	-	-	-	-	-	-	-	-	-	-	-
Part time	-	1	-	-	-	1	1	2	1	1	1	-	8
Full time	1	-	1	1	-	-	-	-	-	-	-	-	3
Technicians	-	-	1	1	-	-	-	-	-	-	-	-	2
Pharmacists	-	-	1	-	-	-	-	-	-	-	-	-	1
School Teachers	9	-	7	5	1	1	1	1	1	-	-	1	27
Occupational Therapists	5	5	9	2	-	1	-	1	-	1	-	1	25
Dietary	-	-	-	-	-	-	-	-	-	-	-	-	-
Graduate Dietitians	4	4	1	2	-	1	1	1	1	1	1	1	18
Student Dietitians	-	-	7	-	-	-	-	-	-	-	-	-	7
Others	71	69	61	50	13	21	21	16	12	16-1/2	11	12	373-1/2
Housekeeping	81	60	17	42	16	15	17	12	7	6	5	10	288
Laundry & Sewing	18	14	15	12	5	6	5	5	5	5	3	2	95
Maintenance	31	39	22	34	7	11	8	5	6	6	5	8	182
Office	31	30	27	17	8	10	9	4	9	3	3	8	159
Paid Social Workers	-	-	-	-	1	-	-	1	-	-	-	-	2
Farm	7	-	7	-	-	-	-	1	-	-	-	-	15
All Others	23	5	9	7	-	1	-	-	1	-	-	2	48
TOTAL	476	436	353-1/2	271	95	130	109	87	82	64	54	82	2,239-1/2

Note - Haileybury and I. O. D. E. Hospitals not reported.

TABLE G18
CONDENSED BALANCE SHEETS OF SANATORIA FOR THE YEAR ENDED DECEMBER 31, 1948

LOCATION	ASSETS AND TRUSTEES' FUNDS					LIABILITIES, RESERVES AND EQUITY				
	Current Assets	Semi-Permanent Investment Funds	Fixed Assets	Permanent Funds (Endowments)	Total	Current Liabilities	Reserve for Bad Debts	Fixed Liabilities	Depreciation and Valuation Reserves	Res. for Permanent Funds (Endowments)
Hamilton	\$185,028	\$420,130	\$2,128,165	\$263,996	\$2,997,319	\$18,439	\$1,000	-	\$709,375	\$263,996
* Nat. San. Ass'n	707,453	1,258,587	3,755,178	888,424	6,589,622	60,838	2,500	-	2,500,860	868,424
London	109,553	63,243	1,774,988	418,563	2,436,346	97,461	-	-	944,932	418,563
Fort William	100,341	85,377	748,873	114,955	1,049,546	32,516	295	\$64,538	178,492	114,955
Ottawa	58,986	-	788,834	195,446	1,043,266	17,586	3,631	57,000	419,437	195,446
Windsor	102,980	-	766,846	-	869,826	17,586	389	-	428,662	353,169
Kitchener	53,722	205,300	502,741	21,004	782,767	16,719	-	-	313,864	424,179
St. Catharines	43,520	24,359	745,538	111,691	925,108	3,248	95	-	136,880	425,180
Brantford	16,867	19,044	443,254	-	479,165	3,083	-	-	68,413	673,194
Cornwall	58,695	19,150	381,589	-	459,434	4,155	250	-	121,501	407,669
** Haileybury	104,718	-	764,797	-	869,515	62,493	-	157,000	253,579	333,528
Kingston	-	-	-	-	-	-	-	-	-	396,443
TOTAL	\$1,611,863	\$2,095,170	\$12,800,763	\$1,994,079	\$18,501,874	\$329,091	\$8,160	\$278,538	\$6,082,995	\$1,994,079
										\$9,809,011
										\$18,501,874

PER BED

Hamilton	\$254.86	\$578.69	\$2,931.36	\$363.63	\$4,128.54	\$25.40	\$1.38	-	\$977.10	\$363.63
* Nat. San. Ass'n	641.97	1,142.08	3,407.60	788.04	5,979.69	55.21	2.27	-	2,269.38	788.04
London	304.33	107.19	3,008.46	709.43	4,129.41	165.19	-	-	1,601.58	709.43
Fort William	442.03	376.11	3,299.00	506.41	4,623.55	143.24	1.30	\$284.30	1,786.31	506.41
Ottawa	278.24	-	3,720.91	921.91	4,921.06	59.35	17.13	\$268.87	1,978.47	921.91
Windsor	504.80	-	3,758.85	-	4,263.66	86.06	1.91	-	2,106.19	921.91
Kitchener	340.01	1,299.37	3,181.90	132.94	4,954.22	165.82	-	-	2,024.45	132.94
St. Catharines	315.36	176.51	5,402.45	809.36	6,703.68	23.53	.69	-	991.88	809.36
Brantford	141.74	160.03	3,724.82	-	4,026.59	25.90	-	-	574.90	809.36
Cornwall	524.06	170.98	3,407.04	-	4,102.09	37.10	2.23	-	1,084.83	809.36
** Haileybury	619.63	-	4,525.43	-	5,145.06	369.78	-	\$928.99	1,500.47	-
Kingston	-	-	-	-	-	-	-	-	-	-
Weighted Arithmetic Mean	\$429.03	\$557.67	\$3,407.18	\$530.76	\$4,924.64	\$87.59	\$2.17	\$74.14	\$1,619.11	\$530.76
Arithmetic	\$397.00	\$364.63	\$3,578.89	\$384.70	\$4,816.14	\$99.69	\$2.45	\$134.74	\$1,445.05	\$384.70
Median	\$340.01	\$170.98	\$3,407.60	\$363.63	\$4,623.55	\$59.35	\$1.30	-	\$1,500.47	\$363.63
Averages										
										\$2,761.03
										\$2,749.51
										\$4,816.14
										\$4,623.55

* Represents combined assets, liabilities, etc., of Toronto Hospital, Muskoka Hospital, and Gage Institute, operated by National Sanatorium Association.

** Represents combined assets, liabilities, etc., of St. Mary's on the Lake Sanatorium and Misericordia Hospital, Haileybury.

TABLE G19

CONDENSED STATEMENT OF ORDINARY CURRENT SURPLUS OF SANATORIA FOR THE YEAR ENDED DECEMBER 31, 1948

LOCATION	OPERATING SECTION										Add Non- operating Revenue (Ex. 5)	Deduct Incidental Fin. Exp. (Ex. 7)	Ordinary Current Surplus (+) or Deficit (-)			
	*IN-PATIENT SERVICES					ALL OTHER SERVICES										
	Revenue (Ex. 4A)	Expense (Ex. 6A)	Surplus or Deficit	Revenue (Ex. 4B)	Expense (Ex. 6B)	Surplus or Deficit	Revenue	Expense	Surplus or Deficit							
Hamilton	\$ 1,109,101.54	\$ 1,081,163.49	+	\$ 27,938.05	\$ 27,938.05	+	\$ 78,237.29	\$ 101,998.83	-\$ 23,761.54	\$ 1,187,338.83	\$ 1,183,162.32	+	\$ 4,176.51	\$ 33,113.82	+	\$ 37,290.33
Weston	930,428.91	1,050,151.65	-	119,722.74	254,098.96	-	56,763.01	1,727,055.30	1,957,888.97	-	230,533.67	80,276.87	\$ 1,937.50	-	152,194.30	
Gravenhurst	596,290.44	653,338.36	-	54,047.92	197,335.95	-	5,108.44	916,300.25	863,504.37	+	52,795.88	12,256.39	431.50	+	64,620.77	
London	870,247.39	812,843.07	+	57,904.32	46,052.86	+	13,225.12	318,509.78	267,619.80	+	50,889.98	3,965.28	7,317.21	+	47,538.05	
Fort William	301,529.74	254,394.68	+	47,135.06	16,980.04	+	6,835.03	19,994.27	13,087.42	+	3,906.58	316,104.48	3,020.00	+	43,743.32	
Ottawa	296,110.21	288,276.18	+	6,835.03	19,994.27	+	13,087.42	10,103.80	4,539.53	+	302,362.80	9,756.12	3,354.25	+	42,743.32	
Windsor	291,425.62	262,623.15	+	28,802.47	14,643.38	+	4,271.80	248,069.00	272,728.95	+	35,342.05	6,840.87	-	+	47,011.87	
Kitchener	225,917.77	190,018.57	+	35,899.20	22,147.00	+	17,875.20	248,433.98	225,942.32	+	20,249.18	3,786.76	-	+	26,678.42	
S. Catharines	193,492.96	170,165.54	+	23,327.72	54,941.02	-	486.06	187,130.63	146,941.45	+	22,891.66	1,167.87	-	+	21,417.05	
Brantford	159,095.23	139,345.85	+	19,749.38	7,595.60	+	438.06	153,428.88	139,449.79	+	13,979.09	1,046.30	-	+	14,454.04	
Cornwall	143,448.09	134,739.15	+	8,708.94	4,710.64	+	5,270.16	143,172.57	110,955.96	+	32,216.61	9,562.82	4,361.34	+	37,418.09	
Haleybury	140,732.57	106,492.90	+	34,239.67	4,463.06	+	2,023.06	143,172.57	110,955.96	+	32,216.61	9,562.82	4,361.34	+	37,418.09	
Kingston	41,422.58	38,589.22	+	2,833.36	-	-	548.00	41,422.58	39,137.22	+	2,285.36	-	-	+	2,285.36	
TOTAL	\$ 5,302,243.05	\$ 5,182,840.51	+	\$ 119,602.54	\$ 470,848.00	-\$ 63,397.01	\$ 534,245.01	\$ 5,773,091.05	\$ 5,716,885.52	+	\$ 56,205.53	\$ 164,980.56	\$ 17,993.15	+	\$ 203,192.94	
PER CAPITA																
Hamilton	\$ 4,225.9	\$ 4,119.4	+	\$ 1,064	\$ 3,886	-\$ 0.905	\$ 4,5240	\$ 4,5081	+	\$ 0.159	\$ 1,262	-\$ 0.0053	+	\$ 1,421		
Weston	4,293.6	4,846.1	-	552.5	6936	- 1549	4,7145	5,3438	- 6293	- 2191	0607	.0021	+	.4155		
Gravenhurst	4,005.2	4,366.4	-	361.2	2536	- 0253	4,5411	4,2795	+	2617	.0510	.0942	+	.3203		
London	4,312.9	4,025.9	+	2185	1702	+	4,0990	3,4441	+	6549	.0438	.0942	+	.6118		
Fort William	3,880.5	3,273.9	+	2717	1779	+	4,2961	4,1093	+	1188	.0438	.0942	+	.1893		
Ottawa	4,024.4	3,931.5	+	0929	1425	+	4,3167	3,8464	+	4702	.1376	.0050	+	.6028		
Windsor	4,110.2	3,703.9	+	2065	1425	+	4,3742	3,6659	+	7083	.1207	-	+	.8290		
Kitchener	3,937.7	3,350.7	+	3905	3152	+	5,2159	4,7353	+	4806	.0795	-	+	.5601		
S. Catharines	4,052.4	3,572.7	+	4897	1,1627	- 0091	4,2202	3,7091	+	5111	.0295	-	+	.5406		
Brantford	4,015.8	3,517.3	+	2043	1,1917	+	4,1333	3,7567	+	3766	.0282	.0154	+	.3894		
Cornwall	3,864.4	3,629.8	+	2346	1,269	+	4,1333	3,7567	+	3766	.0282	-	+	.3894		
Haleybury	3,876.7	2,931.1	+	9437	1,230	- 0568	3,9460	3,0581	+	8879	.2636	1.202	+	1.0313		
Kingston	4,117.1	3,835.5	+	2816	.0545	- 0545	4,1171	3,8900	+	.2271	-	-	+	.2271		
Weighted Arithmetic Mean	\$ 4,141.8	\$ 4,049.4	+	\$ 3,678	\$ 4,4173	-\$ 0.495	\$ 4,5096	\$ 4,4657	+	\$ 0.439	\$ 1,289	\$ 0.0141	+	\$ 1,587		
Arithmetic Mean	\$ 4,059.6	\$ 3,777.6	+	\$ 3,205	\$ 3,167	-\$ 0.038	\$ 4,3748	\$ 4,0289	+	\$ 3,460	\$ 0.966	\$ 0.0236	+	\$ 4,190		
Median	\$ 4,024.4	\$ 3,703.9	+	\$ 2,466	\$ 1,848	-\$ 0.019	\$ 4,3064	\$ 3,8682	+	\$ 4,234	\$ 0.701	\$ 0.0036	+	\$ 4,450		

* Represents revenue and expense of services recognized by the Provincial Department of Health for grant purposes.

** Represents revenue, expense, etc., of combined operations of Toronto Hospital, Muskoka Hospital and the Gage Institute, operated by National Sanatorium Association.

CHAPTER V

POSTSANATORIUM CARE AND REHABILITATION, INCLUDING VOCATIONAL TRAINING

Provincial Responsibilities for Pneumothorax and Pneumoperitoneum Treatment.

Pneumothorax treatment is a method of inducing a partial collapse of the lung by the injection of air into the pleural cavity. This form of treatment is used extensively. Where adequate facilities are available many patients can be discharged from sanatoria and receive continuation of pneumothorax treatment.

The distribution of the pneumothorax treatment centres is shown in Map G5. Pneumothorax treatments are given without charge to the patient. The Ontario Department of Health pays \$ 3.00 per treatment to the physicians and clinics providing this service. Similar arrangements exist for pneumoperitoneum treatment. The total cost of this service for the year 1948 was approximately \$ 100,000.

Postsanatorium Care.

Some patients who are discharged from sanatoria require financial assistance. This is termed "postsanatorium care" and is defined in clause (j) of section 1 of The Sanatoria for Consumptives Act as follows:-

"Postsanatorium care of a former patient shall include,

- (i) transportation from the sanatorium to the place of residence,
- (ii) proper living accommodation, food, clothing and any other necessities of life, and
- (iii) special treatment for tuberculosis and transportation to and from any place at which such special treatment is available".

In section 37 of the Act, it is the duty of the local board of health to furnish post-sanatorium care for any patient who is indigent. In the case of a patient without a municipal residence, the province undertakes this responsibility; this service costs the province approximately \$ 30,000 a year.

Voluntary Agencies

The Samaritan Club, Toronto is a volun-

tary agency concerned exclusively with rehabilitation of patients discharged from sanatoria. Upon the request of the committee the club forwarded copies of the annual report for the year 1949 and reports dealing with rehabilitation services in preceding years. Services in 1949 included financial and other assistance to nine women and six men who had been discharged from sanatoria. There 15 former patients were all placed in occupations whereby they are self-supporting. The activities of this organization provide firsthand information as to the various types of assistance needed by patients who are discharged from sanatoria and experience in how this assistance may best be provided. There is also a Samaritan Club in Hamilton which does similar work.

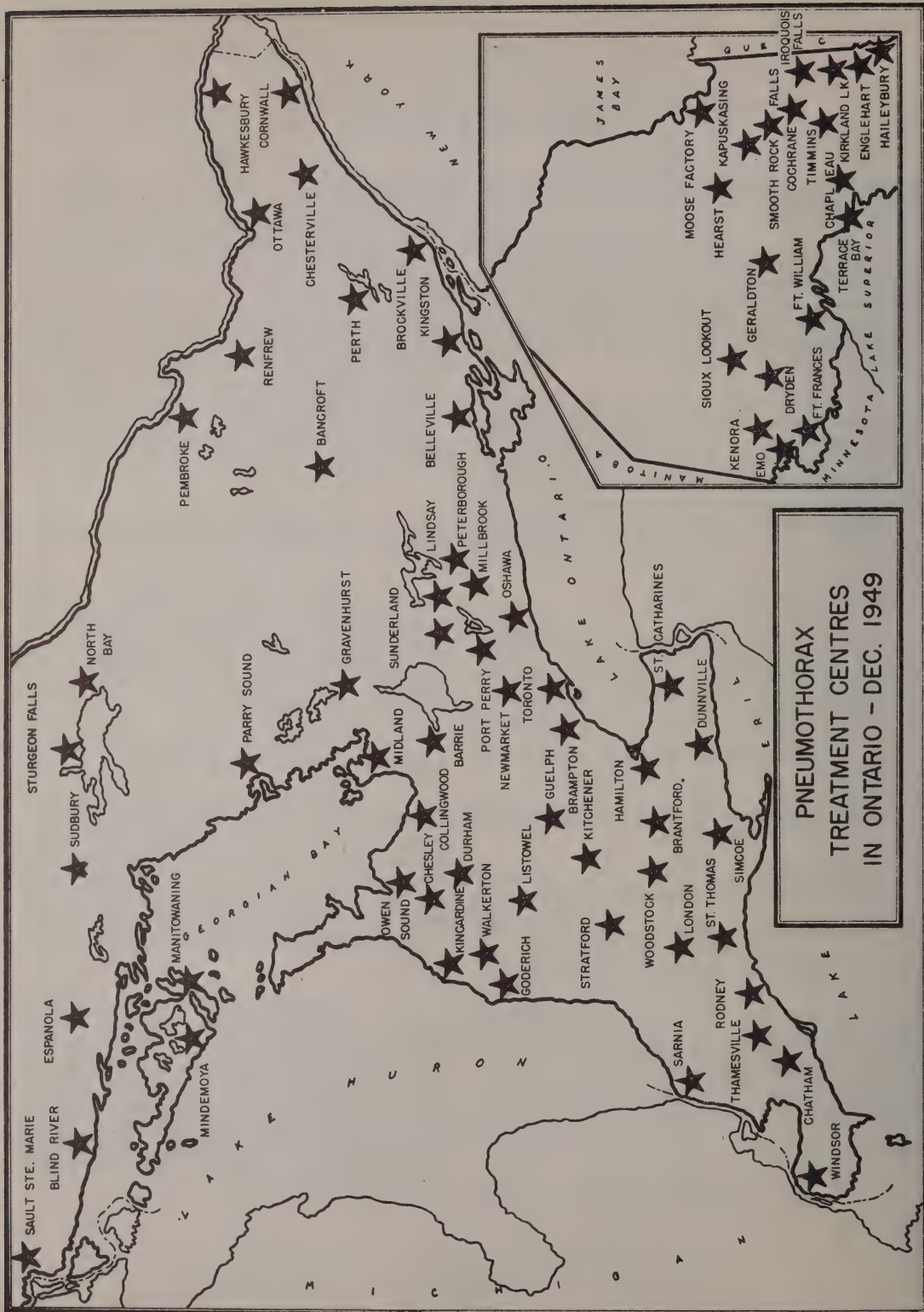
Disposition of Maximum Benefit Continuing Sputum Positive Cases

Before coming to a decision on the above it is recommended that consideration be given to a further study of the relative value of housing maximum benefit cases in private homes, as at present, versus homes in which 12 to 20 could be accommodated. This applies as well to ordinary cases requiring postsanatorium care.

Vocational Counselling and Training

The matter of vocational training requires much consideration, but merits serious consideration. So far as possible, patients should be returned to their original employment. Where this is not feasible, or where there has not been a regular occupation, vocational training should be given, preferably commencing before discharge from sanatorium and continued under suitable auspices thereafter.

A central bureau and regional bureaus could be established in which voluntary agencies could cooperate and oversee the training and help in the placement of rehabilitated patients. It is recommended that placement officers be appointed and that efforts be made to publicize the need for employing exsanatorium patients and the value of such employment. It has been shown that such persons have a good record for attendance at work and freedom from accidents.



**REPORT OF THE ONTARIO
HEALTH SURVEY COMMITTEE**

SECTION H

CONTROL OF CANCER

(Pages 335 to 346)

H. CONTROL OF CANCER

CONTENTS

	Page
Summary	338
Recommendations	339
Chapter I: Nature and Extent of the Cancer Problem in Ontario	340
Chapter II: Agencies Concerned with Cancer in Ontario.....	344

CONTROL OF CANCER

SUMMARY

In Chapter I of this section there is an analysis of all cancer cases diagnosed in the public general hospitals of Region 2 during the year 1947. This is a result of the Survey Committee's study of all patients hospitalized during the year in the counties of Brant, Wentworth, Halton, Norfolk, Haldimand, Lincoln and Welland.

The study covered 58,007 patients (excluding newborn), and it revealed 1,216 cases diagnosed as suffering from malignant neoplasms. These patients were given 27,431 days of hospital care. A breakdown of the survey findings by primary site, age, sex, length of stay, and deaths is provided in Tables H2 and H3.

Further indication of the extent of the cancer problem in particular areas is provided by the report of a survey of Middlesex County, conducted jointly by the Ontario Department of Health and the Ontario Medical Association. This was based on a study of 670 cases; and the findings are also reported in Chapter I.

These studies in local areas serve to demonstrate the value of such a practical statistical approach to basic cancer control data. There has

been no central source of information on its incidence and prevalence, because cancer is not a reportable disease.

This section of the Survey Report deals largely with the activities of the various agencies, both governmental and voluntary, which are doing valuable work in this difficult field of health. Chapter II highlights the work of the Ontario Department of Health, the Ontario Cancer Treatment and Research Foundation, the Ontario Division of the Canadian Cancer Society, the National Cancer Institute of Canada, and the Commission for the Investigation of Cancer Remedies. All of these agencies are concerned with the control of cancer in Ontario.

The recommendations on page 339 constitute a plan for the progressive extension of the facilities for cancer control in Ontario.

The need for pathologists is again stressed by the recommendation of the Survey Committee that an annual investment of \$52,000 be made in university fellowships, lectureships and research equipment to encourage work in this field. (In this regard see also Section A, Volume I, Report of the Ontario Health Survey Committee, page 67.)

CONTROL OF CANCER RECOMMENDATIONS

It is recommended that, -

1 - The Ontario Cancer Treatment and Research Foundation continue to develop its cancer control program in the following stages--

- (a) by extending facilities for treatment, particularly equipment and staff in the eight cancer treatment centres conducted by the Foundation;
- (b) by improving and extending diagnostic facilities, particularly x-ray facilities and biopsy service;
- (c) by eliminating charges for radiotherapy as soon as the necessary financial and administrative arrangements can be made;

(d) by developing, ultimately, a complete cancer service providing surgical facilities, hospitalization, home care and rehabilitation.

2 - The case recording in the eight cancer treatment centres conducted by the Foundation be extended with effective follow-up arrangements and that it be coordinated through a central statistical office.

3 - Funds be provided for fellowships, lecture-ships and equipment to encourage cancer research in the four universities in Ontario which have medical schools, according to the following scale:

<u>Annual</u>	1st year, \$ 1,000 each for four universities.....	\$ 4,000
<u>Fellowships</u>	2nd year, \$ 1,500 " " " "	6,000
	3rd year, \$ 2,400 " " " "	9,600
	4th year, \$ 3,600 " " " "	14,400
	Subtotal	\$34,000
<u>Annual</u>	\$ 2,000 each for four universities.....	\$ 8,000
<u>Lectureships</u>	\$ 2,500 " " " "	10,000
<u>& Equipment</u>		
	Grand Total	\$52,000

CHAPTER I

NATURE AND EXTENT OF THE CANCER PROBLEM IN ONTARIO

Complete information respecting the incidence and prevalence of cancer in Ontario is not available. The reason for this is apparent. Cancer is not a reportable disease. Even if this obstacle were overcome and all known cases of cancer were reported, there would be an unknown number of undiagnosed cases in the community.

Since it is impossible to ascertain the exact number of cases of cancer it is necessary to fall back upon the available information as an estimate of the extent of this disease.

The most accurate information available is the death rate from cancer, being the record of the number of persons dying from cancer in Ontario each year.

The death rate is recorded in the following table which is reproduced from "The Thirteenth Annual Statistical Report on Cancer" for the year 1948, issued by the Department of Health of Ontario. The data for 1948 have been added to the table.

The following statements are taken from the same report.

"The absolute number of recorded cancer deaths (including Hodgkin's disease and leukaemia) has increased by 70 per cent since 1928. The proportion of all deaths attributed to cancer has risen from 9.5 in 1928 to 14.4 in 1947. The crude cancer death rate has risen from 108 deaths per 100,000 population in 1928 to 143 per 100,000 in 1947. It is noteworthy that there has been little change in the adjusted death rate during the past twelve years".

"The limitations of these crude data as an index of the trend in cancer mortality should be realized. The recorded increases in the volume of cancer deaths and in the crude cancer death rate do not reflect a true increase in the incidence, prevalence or mortality from cancer. Correction for changes in the age distribution of the population alone eliminates a large part of the observed increase.... Much of any increase which remains may be accounted for by improvement in the quality of medi-

TABLE H1
CANCER MORTALITY IN ONTARIO 1928 - 1948

Year	Total Deaths, All Causes	Cancer* Deaths	Per cent of Total Deaths	Crude** Death Rate	Adjusted*** Death Rate
1928	27,128	3,534	9.5	108	126
1929	38,123	3,524	9.2	106	122
1930	37,313	3,736	10.0	112	127
1931	35,705	3,820	10.7	111	126
1932	36,436	3,943	10.8	114	129
1933	35,301	4,173	11.8	119	132
1934	35,105	4,176	11.9	118	130
1935	36,317	4,355	12.0	122	132
1936	37,571	4,594	12.2	127	138
1937	38,475	4,716	12.3	130	137
1938	36,890	4,622	12.5	126	131
1939	37,531	4,726	12.6	128	131
1940	38,503	5,037	13.1	134	136
1941	39,226	5,161	13.2	136	136
1942	39,119	5,208	13.3	134	134
1943	41,063	5,417	13.2	138	135
1944	39,781	5,494	13.8	139	136
1945	39,499	5,533	14.0	138	135
1946	39,758	5,659	14.2	138	134
1947	41,619	5,992	14.4	143	137
1948	42,364	6,209	14.7	145	137

*Including Hodgkin's disease and leukaemia.

**Rate per 100,000 estimated population, all ages.

***Adjusted rate per 100,000 adjusted for age and sex based on the population of Ontario, 1941 census.

cal certification and the increasing attention given to this disease". (The crude death rate in 1948 was 145 per 100,000 population).

In addition to the foregoing information respecting the death rate, some data have been obtained in the course of the survey conducted by the Ontario Health Survey Committee in the public general hospitals of Region 2, (comprising the Counties of Brant, Wentworth, Halton, Norfolk, Haldimand, Lincoln and Welland) during 1947. The population of Region 2 in 1947 was 578,055.

This survey covered 58,007 discharges and deaths (excluding newborn) contributing 550,761 days of hospital care. Included in this group were 1,216 malignant neoplasm cases (2.1 per cent of the total) with 27,431 days of hospital care (5.0 per cent of the total). The males contributed 538 cases and 12,204 days of hospitalization and the females contributed 678 cases and 15,227 days of hospitalization.

In table H2, the distribution of the cases by primary site is presented. The table shows the number and percentage of the cases allocated to each primary site. It also shows the number of deaths, the days of hospital care and the average stay in hospital for each site.

Table H3, shows the distribution of the cases by diagnosis, sex and age groups. The largest number was in the age group, 55 - 64 years, comprising 40.7 per cent of all cases.

This survey reveals other interesting facts but the examples given are sufficient to illustrate the value of this approach in the planning of any cancer control program. Such information would be of fundamental importance, for example, in estimating the cost of hospitalization in a program for the control of cancer.

A third source of information consisted of the results of a survey of the incidence and prevalence of cancer in Middlesex County conducted in 1940 jointly by the Department of Health of Ontario and the cancer committee of the Ontario Medical Association with the cooperation of the two local medical societies in the area.

In the pilot survey of Middlesex County an endeavour was made to ascertain all of the known cases of cancer in the county and to tabulate certain fundamental data respecting each case. The following are merely extracts of a few of the more striking findings.

The survey revealed a total of 670 cases resident in Middlesex County. Of these 450 were

residents of London and 220 lived in Middlesex County outside of London. Some 446 cases, nonresident in Middlesex County, were also recorded. The data presented refer to the 670 Middlesex County cases only. Of these 670 cases, 42.5 per cent were males and 57.5 per cent were females.

Of the 670 cases reported, 327 or 48.8 per cent were new cases first seen during the survey year; 427 or 63.7 per cent of the total reported were under treatment at some time during the year; 25.7 per cent had been diagnosed in a previous year and were seen for follow-up observation purposes only.

Additional information included the number of cases confirmed by microscopic examination, the number having metastatic lesions and the location of the primary lesion.

Three different morbidity rates were computed to describe cancer morbidity in the population surveyed. These data were presented by age groups as well.

1. The incidence rate: the number of cases first diagnosed during the reporting year per 100,000 population. This was found to be 253 per 100,000 population. The rate for males was 240 and for females 274.

2. The prevalence rate: the number of cases treated or diagnosed during the year per 100,000 population. This proved to be 328 for males, 388 for females and 352 for both sexes combined.

3. The total case rate: the total number of known cases of cancer per 100,000 population. This proved to be 518 per 100,000 population.

The authors of the survey considered that it would be unwise to apply these rates to Ontario as a whole without a cautious examination and careful study of the entire picture. They considered that the study should be repeated and extended.

By way of summary, it may be stated that continuation of the studies conducted by the Ontario Health Survey Committee relating to cancer in hospital patients and the studies conducted by the Department of Health and the Ontario Medical Association respecting cancer in a selected community, together with the cancer death rate would provide a reasonably accurate picture of the incidence and prevalence of cancer in Ontario. Continuation of such studies with the resulting data is an essential preliminary step for any organized measures for cancer control.

TABLE H2
HOSPITALIZED CANCER CASES BY SITE

Region No. 2 - 1947

Site	Cases	Per cent	Deaths	Days of Care	Average Length of Stay in Days
Breast	153	12.6	19	2,500	16.3
Cervix & corpus uteri	136	11.2	8	2,213	16.3
Intestines (except rectum)	109	9.0	31	3,933	36.1
Stomach	102	8.4	41	2,659	26.1
Buccal cavity	36	3.0	2	202	5.6
Rectum	70	5.7	14	2,803	40.0
Other digestive system	51	4.2	26	795	15.5
Respiratory	67	5.5	33	1,540	23.0
Unqualified parts of uterus	44	3.6	6	896	20.4
Ovary, Fallopian tube & broad ligament	23	1.9	8	433	18.8
Other and unspecified female genital organs	10	0.8	1	156	15.6
Prostate	68	5.6	11	1,705	25.1
Testis	7	0.6	1	67	9.6
Other and unspecified male genital organs	2	0.2	1	27	13.5
Kidney	20	1.6	4	434	21.7
Bladder & other urinary organs	69	5.7	17	1,566	22.7
Melanoma of skin	5	0.4	-	105	21.0
Others of skin	14	1.1	1	432	30.9
Eye	5	0.4	1	80	13.0
Brain & nervous system	8	0.6	2	109	13.6
Thyroid gland	2	0.2	-	39	19.5
Bone (including jaw)	11	0.9	3	888	80.7
Connective tissue	2	0.2	1	29	14.5
Lymph nodes	10	0.8	2	229	22.9
Unspecified sites	122	10.0	34	2,528	20.7
Lymphosarcoma	12	1.0	3	262	21.8
Hodgkin's disease	16	1.3	2	294	18.4
Other lymphoma (reticulosis)	2	0.2	-	9	4.5
Multiple myeloma	8	0.7	4	232	29.0
Leukaemia & aleukaemia	32	2.6	10	266	8.3
TOTAL	1,216	100.0	286	27,431	22.5

TABLE H3

DISTRIBUTION OF CANCER CASES BY DIAGNOSIS, SEX AND AGE

Region No. 2 - 1947

SITE	AGE UNDER 14		AGE 15-34		AGE 35-44		AGE 45-54		AGE 55-64		AGE 65-74		AGE 75+		AGE N.S.		TOTAL Cases	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
Breast		1		12		32		30	2	56		7		12		1	2	151
Cervix & corpus uteri				9		30		51		36		5		5				136
Intestines (except rectum)			3	3	3	7	7	12	23	24	4	8	5	10			45	64
Stomach			2		5	4	11	7	36	14	6	2	11	2	2		73	29
Buccal cavity	1		1	1		2	6	1	16	2	1		3	1	1		29	7
Rectum						1	6	4	22	16	2	10	6	3			37	33
Other digestive system				1		2	10	2	11	7	2	1	7	8			32	19
Respiratory			2	1	1	1	18	3	23	9	2	3	4				50	17
Unqualified parts of uterus				2		7		14		17		2		2				44
Ovary, Fallopian tube & broad ligament						4		4		9		3		3				23
Other & unspecified female genital organs						2		2		3				3				10
Prostate							4		33		14		17				68	
Testis			2		1		2		2								7	
Other & unspecified male genital organs									1		1						2	
Kidney	2			1			6	2	5	2	1			1			14	6
Bladder & other urinary organs						2	7	4	34	5	2		13	2			58	11
Melanoma of skin									2	1	1		1				4	1
Others of skin		2		1					2	5		1	1	2			3	11
Eye							2	1	1		1						4	1
Brain & nervous system		1		1			5	1									5	3
Thyroid gland								1		1							1	1
Bone (including jaw)				2	2	1			3	2			1				7	4
Connective tissue								1		1								2
Lymph nodes						1		2	3	2		1	1				4	6
Unspecified sites	2	1	3	10	4	11	14	10	27	22	3	2	6	7			59	63
Lymphosarcoma	1	1	2	2	1		1	1		2		1					5	7
Hodgkin's disease			3	4	4	2	1		1				1				10	6
Other lymphoma (reticulosis)									2								2	
Multiple myeloma						1	1	1	4								3	5
Leukaemia & aleukaemia		9		1	5		4	4	3	2	2	1		1			14	18
TOTAL	6	15	20	51	31	103	105	158	254	241	42	47	77	62	3	1	538	678

CHAPTER II

AGENCIES CONCERNED WITH CANCER IN ONTARIO

There are both governmental and voluntary agencies active in the field of cancer control.

The federal government has entered the field through its provision of a federal-provincial grant. This is an annual grant of money which is divided amongst the provinces on the basis of population with the stipulation that the federal grant is to be matched by the province. Ontario's share of this grant is \$1,167,000 a year.

For many years past the Government of Ontario has been developing a program for the control of cancer. The Department of Health established centres for the treatment of persons suffering from cancer. The department purchased supplies of radium which were distributed without charge to the various institutions which could use the radium for treatment of cancer patients. A radium emanation plant was built by the department, for the manufacture of radioactive materials which were distributed without charge to these institutions. Annual grants totalling about \$100,000.00 were given to the treatment centres to subsidize the treatment of cancer patients. The Department of Health in collaboration with the cancer centres developed a system of uniform case recording and follow-up which has been in operation since 1936. A number of these projects were transferred to the jurisdiction of the Ontario Cancer Treatment and Research Foundation and are further described in the following paragraphs.

Ontario Cancer Treatment and Research Foundation

The Ontario Cancer Treatment and Research Foundation was established by statute in 1943 (Statutes of Ontario, 1943, Chapter 19). It is a corporation consisting of seven to 10 members appointed by the Lieutenant-Governor in Council. There is an advisory medical board. The Act states, "the object of the Foundation shall be the conduct of a program of diagnosis, treatment and research in cancer."

The Foundation has assisted the Survey Committee by providing information on every phase of its operations.

The treatment facilities operated or assisted by the Foundation comprise eight treatment centres located at Windsor, Hamilton, Toronto, London, Ottawa (2), Kingston and Port Arthur. An auxiliary centre at Sarnia has also been established.

In addition the Foundation operates diag-

nostic and follow-up clinics at Sudbury, Port Arthur and Timmins.

Financial support is extended by the Foundation on an experimental basis to the cancer detection clinic at the Women's College Hospital in Toronto.

The Foundation grants to hospitals and universities for research are shown later in this chapter. The remaining activity of the Foundation is professional and public education.

The nature and extent of the services performed by the Foundation are indicated in the financial statement on the following page.

Canadian Cancer Society, Ontario Division

The Ontario Division of the Canadian Cancer Society has furnished at the committee's request, an outline of its organization and functions. The Society does not receive any government grants nor any grants from the Foundation. Its funds are derived from public subscription.

The financial statement for the year 1948 shows the Ontario Division had receipts totalling \$176,351.11, disbursements of \$106,888.97 and a balance of \$69,462.14.

Since 1945, 25 local units or branches have been organized in Ontario.

In cooperation with the Foundation, the Society has had public education as its main object and has also developed a welfare service program in cooperation with the treatment clinics of the Foundation.

The Society carries on its education program through the distribution of specially prepared literature, films, displays, meetings, fairs and exhibitions, radio and newspaper publicity and both medical and lay speakers are available in all organized centres.

The first cancer information centre in Canada, known as "The Little Red Door" was established by the Toronto Branch of the Society.

The welfare service program gives direct assistance to patients. Thus 30,000 dressings are distributed free in the city of Toronto each month. Transportation of patients to clinics is part of this

CUMULATIVE SUMMARY OF REVENUES AND CURRENT AND CAPITAL EXPENDITURES
FROM THE INCEPTION OF THE ONTARIO CANCER TREATMENT AND RESEARCH FOUNDATION
IN APRIL 1944 to 31st DECEMBER 1948

Revenues:

Donations received from the public	\$ 1, 149, 000.	
Grant and appropriations from Province of Ontario	720, 000.	
Income from, and profit on sale of investments	<u>84, 000.</u>	\$ 1, 953, 000.

Less Current and Capital Expenditures:

Grants for scientific and clinical research	\$ 276, 000.	
Grants to and cost of operating cancer treatment clinics, indirectly or directly financed by Foundation.	219, 000.	(1)
Cost of operation of diagnostic facilities	17, 000.	
Other clinical expenses	16, 000.	(1)
Purchases of capital equipment:		
Radium and therapy equipment	\$ 99, 000	
Other equipment	<u>13, 000</u>	112, 000.
Administrative and general expenses	54, 000.	(1)
Expenses of 1946 cancer campaign	101, 000.	
Allocations to Ontario Division, Canadian Cancer Society for cancer education work	<u>102, 000.</u>	\$ 897, 000.
Balance, excess of current assets over current liabilities at 31st December 1948		<u><u>\$ 1, 056, 000</u></u>

Note (1): Excluding provisions for depreciation on equipment owned.

ALLOCATION OF FUNDS AVAILABLE AT 31st DECEMBER 1948

Commitments to hospitals in London and Hamilton for construction grants payable during, and on completion of, construction of cancer clinics by those hospitals	\$ 250, 000	
Estimated cash requirements for 1949 program	206, 000	
Balance, earmarked for construction grants to hospitals in Toronto, Ottawa and Windsor in connection with clinic construction programs	<u>600, 000</u>	
Total funds available, as above		<u><u>\$ 1, 056, 000</u></u>

Note:- The estimated sum required for completion of the necessary clinic construction programs in Toronto, Ottawa and Windsor is very substantially in excess of the balance available for those purposes. The funds made available by the federal cancer grant, (if matched by Ontario) cannot be used for such construction.

program. Certain patients are provided with board and room while receiving treatment as out-patients at clinics, thus avoiding the necessity of admission to hospital.

This brief description of the activities of the Society gives some indication of the role which it plays in the field of cancer control.

National Cancer Institute of Canada.

The National Cancer Institute of Canada is a voluntary organization with representation from all agencies in Canada concerned with the cancer program.

The following extracts are from a statement furnished at the request of the committee: -

"The Institute's main function is to co-ordinate all scientific and professional aspects of the cancer problem".

"The National Cancer Institute of Canada presently is sponsoring a programme of fundamental research in our Canadian universities, a programme of professional education, a central tumour registry and is attempting to coordinate the provincial diagnostic and treatment programmes so that comparability of data will be possible".

The Institute is financed in part by contributions from the Canadian Cancer Society and from provincial government grants. Up to November, 1949, all provinces except Manitoba and Ontario were contributing seven per cent of their federal grant to the Institute. During the year 1950 the Ontario Cancer Treatment and Research Foundation turned over to the National Cancer Institute of Canada seven per cent of Ontario's share of the federal cancer control grant. The sum of \$81,869.90 was provided by the Province of Ontario which was reimbursed to the extent of 50 per cent by the federal government. The Foundation hopes to continue this arrangement in subsequent years. The National Cancer Institute has assumed financial responsibility for carrying on the fundamental cancer research program which was initiated by the Foundation in Ontario. The Foundation has stated that it will continue to finance clinical research in cancer.

The remaining agency in Ontario is The Commission for the Investigation of Cancer Remedies. This was authorized by statute in 1938 (Statutes of Ontario, 1938, Chapter 4). As its name implies, the Commission is responsible for the investigation of methods of treatment or remedies for cancer. The investigation is intended to protect the public.

**REPORT OF
THE ONTARIO HEALTH
SURVEY COMMITTEE**

VOLUME III

Hospital and Medical Prepayment Plans

Public Health Services

Handicapping Conditions in Children

Rehabilitation of Adults

**THE THIRD VOLUME OF A THREE-VOLUME REPORT
TO THE MINISTER OF HEALTH FOR ONTARIO**

1 9 5 1

REPORT OF THE ONTARIO HEALTH SURVEY COMMITTEE

1 9 5 1

VOLUME III

CONTENTS OF VOLUME III

Letter of Presentation	Page 351
Index to Tables	Page 352
Index to Charts and Maps	Page 353
Section I: Prepayment Plans for Hospital and Medical Care in Ontario.	Page 355
Section J: Public Health Services	Page 375
Section K: Handicapping Conditions in Children	Page 417
Section L: Rehabilitation of Adults	Page 439

VOLUME I CONTAINS

Hospital Facilities and Services
Mental Facilities and Services
Private Nursing Homes
Dental Facilities and Services

VOLUME II CONTAINS

Medical Manpower in Ontario
Provision of Nursing Care
Prevention, Treatment and Control of
Tuberculosis
Control of Cancer

The Honourable Mackinnon Phillips, M.D., C.M.,
Minister of Health for Ontario.

Dear Sir:

I have the honour to present the third volume of the report of the Ontario Health Survey Committee. The first volume, you will recall, was presented in January, and the second volume in April, 1951.

The Ontario Health Survey Committee was appointed by an Order-in-Council approved by His Honour the Lieutenant-Governor the ninth day of September, 1948.

The Order-in-Council contains a provision that:—

“The Committee enquire into and report to the Minister of Health upon—

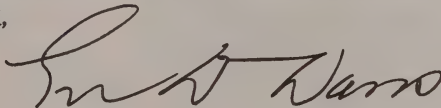
- (i) existing health, hospital and related facilities and services;
- (ii) such other matters as are pertinent to the subject; and
- (iii) a plan for the improvement, extension and establishment of such health, hospital and related services as will ensure the most effective development of health services.”

In order to conduct a survey of the scope defined by these terms of reference, and after completion in November, 1948, of a pilot study in one region of the province, the Survey Committee recommended establishment of ten special committees, which were authorized by a second Order-in-Council dated the twenty-first day of April, 1949. Each special committee was formed with a view to assisting in a specific part of the health survey, and therefore its membership included men and women with specialized knowledge and experience, and with particular interest in the subjects under consideration. The special committee members, who contributed generously of their time and energy that this survey might be as well informed as possible, are listed on pages (iii) to (v), together with the organizations by whom they were nominated.

This volume of the report, like the two which preceded it, contains the results of research into four phases of the health question. Volume I dealt with Hospital Facilities and Services, Mental Facilities and Services, Private Nursing Homes, and Dental Facilities and Services. Volume II covered Medical Manpower in Ontario; Provision of Nursing Care; Prevention, Treatment and Control of Tuberculosis; and Control of Cancer. This Volume contains survey material on Prepayment Plans for Hospital and Medical Care, Public Health Services, Handicapping Conditions in Children, and Rehabilitation of Adults.

It is a pleasure to acknowledge the assistance of all committee members, consultants, and members of the Survey staff, and the cooperation of the various departments of the Government of Ontario. The assistance of officials of the Department of Health is deserving of particular mention.

Respectfully submitted,



GEORGE D. DAVIS
Chairman,
Ontario Health Survey Committee.

June 30, 1951.

INDEX TO TABLES IN VOLUME III

Table Number	Page	Table Number	Page
I-1 Estimated Number of Persons Covered by Various Types of Arrangement for the Payment of Hospital or Medical Expenses in Ontario in 1950 (Including Dependents and Duplicate Coverage)	359	J8 Financial Statement of Health Units of Ontario, 1948, as per Audited Statements Submitted to the Ontario Department of Health	402
I-2 Growth of Blue Cross Plan for Hospital Care in Ontario, 1941 to 1950	363	J9 Expenditures of Municipal Funds on the Conservation of Health, Year Ending Dec. 31, 1948, as Reported to the Department of Municipal Affairs of Ontario.	402
I-3 Estimated Use of Public General Hospitals in Ontario by Blue Cross Patients in 1948	364	J10 Estimated Cost of Including All Ontario Municipalities in Public Health Grants	405
J1 Chief Causes of Death for All Ages in Ontario, Average, 1944-1948	379	J11 D.P.H. Graduates of the School of Hygiene, University of Toronto	409
J1-a Chief Causes of Death Among Infants Under One Year of Age, Ontario 1944-48	380	J12 Number of Households in Ontario by Regions, Dec. 31, 1948.....	411
J1-b Chief Causes of Infant Mortality in Ontario	381	J13 Motor Vehicle Accident Statistics, Province of Ontario, 1950	413
J1-c Communicable Disease Statistics for Ontario, 1901-1949	385	J14 Ontario Physicians Practising Industrial Medicine, Dec. 31, 1948, by Type of Work	414
J2 Legislation Under the Jurisdiction of the Ontario Department of Health, Direct	394	J15 Population of Ontario, Census Years--1901-1951	415
J3 Legislation Under the Jurisdiction of the Ontario Department of Health, Indirect	395	K1 Auxiliary Classes for Handicapped Children, 1948	423
J3-a Amounts Paid in Salaries to Employees of the Provincial Department of Health for Year Ending March 31, 1949	395	K2 Paediatric Beds or Cribs in General Hospitals, in 1948	426
J4 Summary of Expenditures, Provincial Department of Health for Fiscal Year Ending March 31, 1949	396	K3 Poliomyelitis Cases in Ontario, 1944-49	431
J5 Ontario Department of Health Revenue for Fiscal Year Ending March 31, 1949	397	K4 General Classification of Disabilities Found Among Hamilton Children of School Age	434
J6 Personnel Reported by 24 Health Units and by the Municipal Boards of Health in Four Townships Over 30,000 Population and 23 Cities Outside Health Units, Dec. 31, 1948.....	399	K5 Number of Handicapped Hamilton Children in Regular Classes Who Might be Considered for Special Placement..	435
J7 Health Units in Ontario in 1951, Date of Formation, and Location of Headquarters	401	K6 Estimated Educational Needs of 426 Handicapped Hamilton Children	436
		K7 A Township Pilot Study of Handicapping Conditions in Children	438
		L1 Accident Claims Settled by the Workmen's Compensation Board of Ontario, 1938 to 1949	444

INDEX TO CHARTS AND MAPS IN VOLUME III

Chart Number	Page	Chart Number	Page
J1 Whooping Cough in Ontario	382	J7 Organization of the Department of Health, Province of Ontario, as of December, 1950	390
J2 Diphtheria in Ontario	382		
J3 Typhoid Fever in Ontario	383	Map Number	
J4 Scarlet Fever in Ontario	383	A1 Division of Ontario into Seven Hospital Regions.....	354
J5 Measles in Ontario	384	J1 Health Units in Ontario, May, 1951 .	403
J6 Tuberculosis in Ontario	384		

In its analysis of hospital and other health facilities and services in Ontario, and in its projection of future needs, the Survey Committee found the plan of dividing the province into seven hospital regions (see Map A1, page 354) a great aid to efficiency and accuracy.

The basic plan was developed as result of extensive studies of all conditions having any bearing on hospitalization. Geography and transportation facilities were considered, the character and distribution of population, trading areas and other predetermined divisions, educational facilities available for the training of medical and other personnel, etc. -- all these were weighed in the balance with the existing patterns of hospitalization as revealed by studying the flow of patients to major hospitals in the province.

The resulting regional division has already received commendation from persons dealing with health matters on a province wide basis, and the Survey Committee has used these divisions throughout its three-volume report.

**REPORT OF THE ONTARIO
HEALTH SURVEY COMMITTEE**

SECTION I

**PREPAYMENT PLANS FOR HOSPITAL AND MEDICAL CARE
IN ONTARIO**

(Pages 355 to 374)

I. PREPAYMENT PLANS FOR HOSPITAL AND MEDICAL CARE IN ONTARIO

CONTENTS

	Page
Summary	358
Chapter I: Inventory of Prepaid Hospital and Medical Coverage in Ontario	359
Chapter II: Government Arrangements for Hospital and Medical Care	361
Chapter III: Blue Cross Plan for Hospital Care in Ontario	363
Chapter IV: Physicians' Services Incorporated	365
Chapter V: Associated Medical Services Incorporated	367
Chapter VI: Cooperative Prepayment Plans	369
Chapter VII: Windsor Medical Services Incorporated	370
Chapter VIII: Prepayment Plans in Northern Ontario Mines	371
Chapter IX: Group Hospital-Medical Insurance Plan of the Federal Public Service	372
Chapter X: Prepaid Hospital and Medical Plans Under Some Other Auspices	373

PREPAYMENT PLANS FOR HOSPITAL AND MEDICAL CARE IN ONTARIO

SUMMARY

In Ontario, the provincial government pays a substantial part of the cost of hospital service. This is true of the tuberculosis sanatoria (see Volume II, Section G, Report of the Ontario Health Survey Committee), and of the mental hospitals (Volume I, Section B), as well as of the public general hospitals. Municipal governments also contribute to the cost of public general hospital service (Volume I, Section A).

Patients in public general hospitals in Ontario have been paying an increasing proportion of the total cost of patient maintenance over the years, while the tendency in other types of public hospital has been for the government's share to increase. Whereas patients in Ontario's public general hospitals in 1933 paid an amount equal to 54.27 per cent of total hospital income, this had increased to 79.13 per cent by 1949 (see Table A1, Volume I, of this report). In dollars, this has meant an increase from \$5,560,820 in 1933 to \$37,533,362 in 1949, as the volume of hospital care has increased.

Clearly, then, it is in the payment of its public general hospital and medical expenses that the public is likely to require outside help. And this is where the prepaid hospitalization and medical care plans come into the picture.

By 1948, the basic year of this survey, something less than 67 per cent of private and semi-private patients in Ontario's public general hospitals and approximately 61 per cent of public ward patients were reported as "self-pay" (see Table A7, Volume I of this report). The Blue Cross Plan for Hospital Care, a voluntary, nonprofit hospitalization plan operated by the Ontario Hospital Association, paid for 25.3 per cent of private and semi-private patients, and for 17.5 per cent of public ward patients in 1948. Other nonprofit and commercial insurance organizations and various government agencies, such as the Workmen's Compensation Board paid a further substantial part of the province's public general hospital accounts.

According to reports of the public general hospitals, Blue Cross patients were given 23.6 per cent of the 2,222,586 days of care rendered to private and semi-private patients in Ontario in 1948; and

approximately 13 per cent of the 2,581,531 days of hospital care used by public ward patients in the same year.

Grouping private, semi-private and public ward patients together, the 1948 reports from public general hospitals to the provincial Department of Health show that the Blue Cross paid accounts on behalf of 21.4 per cent of the 469,916 patients who received treatment in "A", "B" and "C" hospitals. These patients accounted for 17.9 per cent of the 4,804,117 days of care given in the 123 public general hospitals in these three classifications.

The Blue Cross Plan itself reports a greater number of payments on behalf of subscribers in hospitals in Ontario during 1948--payments for 979,754 days of care on behalf of 126,727 patients. Blue Cross figures show 25,810 more patients, and 118,394 more days of care than the above reports from public general hospitals because they include payments to some private hospitals (all but one of which were licensed by the provincial government) and nursing homes with which Blue Cross has entered into a co-operating arrangement. Blue Cross also paid for a limited number of days' care on behalf of patients in tuberculosis sanatoria and mental hospitals, as well as on behalf of a few public general hospital patients who were taken ill while away from home in another province or in the United States.

Blue Cross activities, which are recorded in greater detail in Chapter III of this section, represent only a part of the whole picture of hospital and medical prepayment in Ontario. As is pointed out in Chapter I, there was, at the time of this survey, no definitive source of information as to the character and extent of such coverage in this province. It is hoped that this lack of information will be corrected as the Prepaid Hospital and Medical Services Act, 1950, takes effect.

The chapters which follow are given over to a description of a number of arrangements for medical and hospital care in operation in Ontario at the time of this survey.

§ Not including Red Cross Outpost Hospitals or the Canadian Mothercraft Centre, Toronto.

CHAPTER I

INVENTORY OF PREPAID HOSPITAL AND MEDICAL COVERAGE IN ONTARIO

At the time of this survey, there were no definitive data as to the extent to which the people of Ontario were protected against sudden, and sometimes crippling, expenditures for hospital and medical care in the event of serious illness or injury. Such information as was available, involving in some instances an accurate count but in others only round estimates, has had to be assembled by the Survey Committee from a variety of sources.

The following Table I-1 has been compiled from such sources as the management of certain

prepayment plans, the Canadian Life Insurance Officers' Association, fraternal societies, Workmen's Compensation Board officials, Co-operative Medical Services Federation, etc. The total number of persons covered by some type of arrangement during 1950, unavoidably includes an unknown number of duplications--individuals who are covered by more than one type of arrangement. Therefore, it cannot be assumed that this table represents the actual number of Ontario men, women and children with some degree of protection against the expenses of hospitalization and medical care.

TABLE I-1

ESTIMATED NUMBER OF PERSONS COVERED BY VARIOUS TYPES OF ARRANGEMENT FOR THE
PAYMENT OF HOSPITAL OR MEDICAL EXPENSES IN ONTARIO IN 1950
(INCLUDING DEPENDENTS AND DUPLICATE COVERAGE)

Form of Protection		Number Covered in 1950§
<u>Nonprofit</u>	(Blue Cross Plan for Hospital Care	1,468,000
	(Cooperative medical plans	124,200
	(Physicians' Services Inc.	109,800
	(Associated Medical Services Inc.	84,000
	(Windsor Medical Services Inc.	87,800
	(Hollinger Employees' Medical Services	7,500
	(Porcupine Employees' Medical Services	12,000
	(Ross & Young-Davidson Mines	1,200
Commercial	(Fraternal and mutual benefit associations	97,500
	(Accident and sickness insurance companies	300,000
	(Group contracts from Life Insurance Companies	600,000
<u>Governmental</u>	(Workmen's Compensation Board	1,250,000
	(Industrial Camps	48,000
	(Ontario Department of Welfare recipients	135,000

§ Number of persons taken to nearest hundred.

Nearly half (approximately 46 per cent) of this total comprised participants in nonprofit plans; another 21 per cent was made up of insurance with commercial companies; and the remainder was eligible for some form of provincial government assistance in the event of medical need. On the strength of these estimates, and making some allowance for duplication, one authority has hazarded that close to two-thirds of the total population of Ontario have some measure of protection against the financial loss attendant upon illness or accidental injury. It was, however, impossible to support this or any other guess with

the facts available at the time of this survey.

A further reservation should be noted, too, in considering these approximations of the number of Ontario persons enjoying some form of protection against hospital and medical expenses. This is the limitation, varying with each type of arrangement, as the extent of coverage. As will be seen in succeeding chapters, which deal with specific protection plans, there is no uniformity in regard to the number of days of hospital care provided or the number and kind of

extra charges for which a given plan will assume responsibility. It may very well happen that the duration of a serious illness may exceed the number of days' hospitalization provided under a given contract, or that extra charges beyond those specifically noted in a contract may be incurred. In such cases the patient either has to pay the additional cost himself, or, if he is unable to do so, he may become an indigent.

As of July 30, 1949, there were 274 companies or mutual associations authorized to underwrite sickness, accident or workmen's compensation insurance in the province. Of these, 133 were authorized to underwrite sickness only; 73 accident and sickness; 40 accident, sickness and Workmen's Compensation; 24 accident only; two Workmen's Compensation only; and two accident and Workmen's Compensation. Of the 152 commercial insurance companies in this group 57 had head offices in Canada, 55 in the United States, 36 in Great Britain, two in Australia, and one each in New Zealand and Switzerland. This may serve to demonstrate the extent of the problem of compiling definitive information on the extent of prepayment.

Dominion Bureau of Statistics Survey

A survey of pension and welfare plans in Canadian industry, published in May, 1950, by the Dominion Bureau of Statistics, attempted to discover the extent of prepaid hospital and medical care, among other employee welfare matters; but the scope of the study was admittedly limited. It did show that, in Ontario, excluding establishments operated by railways, there were 166,934 employees (in 1,219 employment units) covered by plans providing cash benefits for medical and hospital services. There were 103,621 employees (in 703 units) reported under plans providing medical care services; and 245,214 employees (in 2,385 reporting employment units) covered by Hospital care plans.

Prepaid Hospital and Medical Services Act, 1950

In 1950 all hospital or medical nonprofit prepayment plans operating in Ontario were placed under the Superintendent of Insurance. The Prepaid Hospital and Medical Services Act, 1950, applies to any body providing hospital, medical, surgical, nursing or dental services, or payment on a nonprofit prepayment basis, but it does not apply to insurers licensed under The Insurance Act, nor to a pension fund and employees' mutual benefit society incorporated under Part XVI of The Companies Act. Associations or other bodies must be registered for the purpose, and the Superintendent of Insurance shall grant registration only if satisfied that the applicant is a bona fide association, that the contracts are fair and reasonable, and that the working capital and reserves are adequate.

Under the above authorities it should be possible to set up machinery for recording and publishing data on prepayment plans which would be helpful to all those interested in furthering the extension of such

plans to those residents of Ontario not already covered.

Unfavourable Risks Proved Costly

An example of the type of information which is invaluable in projecting such plans is contained in a 1948 experience reported by the Ontario Hospital Association's Blue Cross Plan for Hospital Care. From 1941, when the Ontario plan was opened, until 1946, enrolment had been confined largely to groups formed in places of employment, but in 1946 enrolment of special groups (Women's Institutes, farm forum, church and other organizations of a permanent nature which had been formed for other than recreational activities) was greatly extended. This was an attempt to make the Blue Cross plan available to those who had been previously ineligible, particularly those in rural areas; but by February, 1949, it was clear that it was bringing an unfavourable selection of risks, and enrolment of such special groups was suspended. Sixty per cent of the plan's 1948 operating loss of \$767,000 was a direct result of the high incidence of hospitalization among these special groups whose members represented only 15 per cent of the plan's total enrolment. A nongroup contract was introduced in April, 1949, to offer Blue Cross coverage to those under 60 years of age who are self-employed, or employed where there are fewer than 10 on the staff. This new contract is subject to a health questionnaire and all applications are carefully underwritten with enrolment subject to exclusion and waiting periods.

Comparison with State Plans

It is clear that a program to provide complete hospital and medical care for the entire population would cost more than the partial protection now provided for a part of the population by existing arrangements through voluntary, commercial and government plans. If existing plans provided all-inclusive coverage, including unlimited stay in hospital, payment of all charges for medical, dental, and nursing service, the cost of drugs, and the cost of treating pre-existing and certain other conditions now excluded, then their premium rates would have to be substantially increased. If existing plans did not exclude sections of the population who are poor risks, this would be another factor contributing to higher rates. Therefore it would be misleading to assume that the cost of existing pre-payment plans might be similar to that of an all-inclusive health insurance plan (see Volume I, Section A, Chapter XII of this report).

Estimates of Health Expenditures During 1948

The Survey Committee has made a conservation estimate of the annual expenditures in Ontario for medical, dental and nursing services, hospitals, (including mental hospitals and tuberculosis sanatoria), for drugs (not including proprietary medicines) and remedial appliances. The estimate, for 1948, based on figures secured by the Committee and believed to be minimal amounted to approximately \$43.00 per capita.

CHAPTER II

GOVERNMENT ARRANGEMENTS FOR HOSPITAL AND MEDICAL CARE

Medical Welfare Plan of the Ontario Medical Association

In 1935 the Ontario Department of Welfare entered into an arrangement with the Ontario Medical Association to provide medical services to those residents of the province who receive mothers' allowance, old age pension, blind pension and direct relief.

Under this arrangement the Department of Welfare pays to the Ontario Medical Association a specified sum per person per month on behalf of all those registered in the above four categories, regardless of whether or not they have need of medical service at that time. In 1948 this monthly payment was raised from 57 to 83 cents per person covered under the plan, and it was 83 cents at the time of this survey. In return for this payment, physicians undertake to give medical care in the doctor's office or at home and to provide certain common drugs. When patients are treated in hospital, the physicians and surgeons are not paid for their services.

During December, 1950, there were 138,284 persons in Ontario who were assured of the medical care provided under this arrangement. The number varied slightly from month to month during the year, but the monthly average worked out to 134,317. In the whole of 1950 there were 304,804 patients treated--an average of 25,400 per month. Many of the beneficiaries under this plan become patients in more than one month of a given year.

Accounts rendered by participating physicians during 1950 totalled \$1,720,340; whereas the total amount paid by the Ontario Department of Welfare to the Medical Welfare Plan of the Ontario Medical Association amounted to \$1,337,802.30. The deficit of \$383,537.70 is made up by the following method of calculation. A "taxed fee" is determined by studying the average morbidity rate, and the average number of welfare calls by participating physicians across the entire province and by using this information in a formula which is intended to reduce any particular fees that seem out of line with the general average. This "taxed fee" in 1950 worked out to \$1,444,000--an amount which was still \$86,197.70 in excess of actual revenue received from the provincial government for this work. This remaining deficit was resolved by paying to all participating physicians an amount equal to 85.72 per cent of their accounts rendered on the "taxed fee" basis.

Accounts rendered by physicians on these welfare cases are on the basis of \$2 per office call, and \$3 per home visit.

Persons covered in Ontario during 1950 are summarized as follows:

Recipients of	Number in Dec., 1950	Average Number per Month During 1950
Old age pension	90,861	87,047
Mothers' allowance	23,241	23,241
Blind pension	2,375	2,298
Direct relief	<u>21,807</u>	<u>21,731</u>
Total	138,284	134,317

Workmen's Compensation Board

An estimated 1,250,000 persons employed in the province of Ontario were eligible at the close of 1950 for compensation under the terms of the Workmen's Compensation Act (R.S.O. 1950, c.430 and the regulations). This entitles employees to compensation and medical aid on two grounds--by reason of injury arising out of an industrial accident, or by reason of disability resulting from an industrial disease. The Act and the regulations define precisely the conditions which determine whether or not an employee is entitled by reason of accident or disease.

The Board is a body corporate of three members appointed by the Lieutenant-Governor in Council (section 53).

Employers who come within the scope of the Act are divided into two classes, listed in Schedules 1 and 2 in the regulations. Those in Schedule 1 are required to contribute a sum of money, the amount of which is assessed by the Board. These contributions are pooled and administered by the Board. Employers in Schedule 2 do not contribute to this fund out of which compensation is paid, but they are held individually liable for compensation and medical aid for those of their employees who become entitled thereto.

The Workmen's Compensation Act was introduced in Ontario in 1915, and from that year until the end of 1950, some 2,893,159 claims had been paid, with benefits totalling \$297,327,061. During the year 1950 there were 163,723 claims settled, and benefits were paid to the value of \$20,487,396.

Hospitals are expected to provide semi-private accommodation at the rates regularly charged the general public; and operating room, drugs, x-ray service, physical therapy and medical service are

also paid for, subject to certain limitations and controls.

Industrial Camps

In 1950 there were approximately 48,000 workmen receiving accident and sickness protection at a maximum cost of \$1 per month under the provisions of the Public Health Act covering employees of lumber camps, saw mills and construction and other industrial camps in the unorganized territories of northern Ontario. Some 331 contracts between employers and physicians were in effect, and 135 contract physicians and 76 assistant physicians were employed thereby during 1949.

Minor accidents and sickness not requiring hospitalization may be treated in small camp infirmaries. Other cases are sent to hospital, the cost being paid by the physician under terms of his contract in some cases, or directly by the employer. The onus of making medical, surgical and hospital care available rests on the employer, although the Department of Health must approve contracts between employers and physicians. The contract physician is empowered by the Department of Health to enforce public health regulations insofar as they pertain to communicable diseases.

This activity is administered by the Division of Industrial Hygiene of the Ontario Department of Health.

CHAPTER III

BLUE CROSS PLAN FOR HOSPITAL CARE IN ONTARIO

The Ontario Hospital Association was incorporated in January, 1941, under Letters Patent from the Provincial Secretary for Ontario; and under its charter it was authorized to operate a nonprofit hospital care prepayment plan. This plan was approved by the Blue Cross Commission sponsored by the American Hospital Association, and has since become known as the Blue Cross Plan for Hospital Care. It is operated as a division of the Ontario Hospital Association.

The plan had its origin in a motion passed by the Ontario Hospital Association board of directors in 1939, authorizing appointment of a committee "to recommend... ways and means of promoting a hospital

care insurance plan in the province, sponsored by the Ontario Hospital Association in cooperation with the Academy of Medicine". The first group of subscribers was enrolled in March, 1941; and by the close of 1950 this plan provided coverage for 1,467,784 residents of Ontario.

During 1950, the Ontario Blue Cross Plan paid for more than \$12 millions worth of hospital care. From the time of its inception until the end of 1950, its total payments on behalf of subscribers and their dependents amounted to close to \$40 millions.

Table I-2 traces in broad outline the growth of this plan over its first 10 years.

TABLE I-2

GROWTH OF BLUE CROSS PLAN FOR HOSPITAL CARE IN ONTARIO, 1941 to 1950*

End of Year	Number of Participants	Hospitalization Provided Annually	General Reserve (Accumulated Totals)
1941	48,000	\$ 46,000	\$ 12,000
1942	137,000	300,000	86,000
1943	245,000	644,000	360,000
1944	374,000	1,170,000	684,000
1945	538,000	1,884,000	1,099,000
1946	748,000	2,708,000	1,364,000
1947	978,000	4,055,000	1,332,000
1948	1,239,000	7,017,000	564,000
1949	1,350,000	10,223,000	1,698,000
1950	1,467,784	12,093,249	3,447,190

*Figures taken to the nearest thousand except in the case of 1950.

In 1948, the base year of this survey, public general hospitals in Ontario (not including Red Cross Outposts or the Canadian Mothercraft Centre, Toronto) reported to the provincial government that Blue Cross had paid accounts on behalf of 100,917 patients, and covering 861,360 days of hospital care. This represented 21.4 per cent of all patients treated in these hospitals during the year, and 17.9 per cent of the total days of care.

The Ontario Blue Cross Plan itself reported 126,727 individual accounts paid in the public general hospitals of Ontario in 1948, covering 979,754 days of hospital care. Of these accounts, 36,374 (28.7 per cent) were paid to Toronto hospitals; and these covered 301,834 (30.8 per cent) of the days of care involved.

It must be borne in mind, however, that the above figures reported by the Blue Cross Plan itself include payments to some private hospitals and nursing homes; a limited number of days' care on behalf of patients in tuberculosis sanatoria and in mental hospitals; and also a small but unknown number of emergency cases which were, in effect, out-patients. It would therefore not be conclusive to attempt to estimate from these figures the average length of stay or the average per diem payment.

Taking the Blue Cross estimate that 91.3 per cent of accounts paid in 1948 were on behalf of what may properly be described as in-patients; and that payments to public general hospitals made up 90.9 per cent of total cases and 89.3 per cent of total days paid that year, the following general estimates may be worked out.

TABLE I-3

ESTIMATED USE OF PUBLIC GENERAL HOSPITALS IN ONTARIO
BY BLUE CROSS PATIENTS IN 1948

	Accounts Paid	Days Paid	Average Length of Stay
Public general hospitals in Toronto	33, 209	298, 669	8. 69 days
Remainder of public general hospitals in Ontario	82, 493	670, 060	8. 12 days
All public general hospitals in Ontario	115, 702	968, 729	8. 37 days

This 8.37 days' average length of stay is somewhat less than the average length of stay figure for all public general hospital patients in Ontario in 1948. This figure was 9.97 days (see Chapter V, Section A, Report of the Ontario Health Survey Committee, Volume I).

Inter-Plan Service Benefit Bank

Late in 1950 the Ontario Blue Cross Plan, together with similar plans operating in eight other provinces, entered into agreement with the Inter-Plan Service Benefit Bank of the Blue Cross Plans of the United States. Under this arrangement subscribers to Blue Cross in Ontario are able to get the same coverage they would have in their own province if they should require hospitalization while visiting in another province or in the U.S. The bank is administered from Chicago. As of January, 1951, there were some 5,000 hospitals in Canada and the U.S. honoring Blue Cross membership cards.

Coverage Under Blue Cross Contracts

Benefits under Blue Cross coverage at the

time of this survey include hospital bed, meals, and general nursing service; use of operating room, anaesthetic equipment and materials; routine clinical laboratory service; electrocardiography; routine biochemistry; basal metabolism test; ordinary drugs and medication; emergency treatment; half the cost of maternity care and the full cost of complications of pregnancy; oxygen therapy; glucose, dextrose and saline solutions; x-ray service up to \$25 while in hospital; allowance for penicillin and streptomycin; and \$1.00 for the admission x-ray chest film. Originally this plan provided 21 days of hospitalization per person per contract year. This was raised in 1944 to 31 days, plus five extra days for each year of continuous participation up to a maximum of 51 days per year. This has again been raised to 51 days in the first year, plus an additional 10 days for each year up to a total of 201 days. Tuberculosis and mental and nervous conditions are covered, but with a maximum limit of 51 days in all. Convalescent care is provided for 14 days in certain convalescent hospitals, but this period may be extended up to 51 days for certain orthopaedic conditions.

Blue Cross Premium Rates

Premiums effective March, 1949, were as follows:

Payroll Deduction Groups

	Public Ward	Semi-Private
Single subscriber.....	\$0.95 per month	\$1.30 per month
Subscriber, spouse and all children under 18 years..	\$1.90 " "	\$2.60 " "

Nonpayroll Deduction Groups and Group Conversion Subscribers

	Public Ward	Semi-Private
Single subscriber	\$1.15 per month	\$1.55 per month
Subscriber, spouse and all children under 18 years..	\$2.30 " "	\$3.10 " "

CHAPTER IV

PHYSICIANS' SERVICES INCORPORATED

Initiated by the Ontario Medical Association in 1948, Physicians' Services Inc. was set up as an independent, nonprofit organization with headquarters in Toronto. Through it, groups of employees can arrange to prepay their medical, obstetrical and surgical expenses on a budget basis.

The P.S.I. plans, at the end of 1950, had a panel of close to 3,000 participating physicians--roughly 2,000 general practitioners and 1,000 specialists. At Dec. 31, 1950, the three plans reported a total of 47,982 subscribers, and coverage of 109,841 persons, including dependents.

Patients covered by any one of the three plans have a free choice of physician. If they choose a general practitioner who has agreed to participate in P.S.I., the corporation pays directly to the doctor the amount set forth in the minimum schedule of payments approved by the Ontario Medical Association, and this constitutes payment in full for the condition under treatment. If the patient requires the services of a specialist and chooses one who has agreed to participate in P.S.I., the corporation will pay him on its prescribed basis, but the doctor is still at liberty to make an additional charge to the patient. If the patient chooses the services of either a specialist or a general practitioner who has not undertaken to participate in P.S.I., the corporation pays to the patient the sum approved in the O.M.A. schedule, and leaves it up to the individual to settle his own account with his doctor.

In September, 1950, Physicians' Services Inc. joined with the Ontario Hospital Association's Blue Cross Plan for Hospital Care to offer a package plan combining surgical, obstetrical, medical and hospital care. This was a new arrangement in addition to the two earlier plans outlined below.

Medical Surgical and Obstetrical Care

Enrolment in this plan is restricted to employee groups of at least 15, or 75 per cent of the total group, whichever is the greater. No medical examination is required, and there is no age limit, nor exclusion for chronic or pre-existing conditions. Employee, wife or husband, and unmarried children under 18 years of age may be included.

In the case of confinements, including prenatal care, premature delivery or miscarriage, prior enrolment of both parents for at least 10 months is required. A waiting period of six months is required before tonsillectomy, herniotomy, or pelvic repair are covered. Refractions require a 10-month waiting

period and not more than one examination in any 12 months is provided.

Exceptions under this contract are as follows:

1 - Illness or accident provided for by the Workmen's Compensation Board or other government agency (including illness or conditions resulting from service in the armed forces).

2 - Tuberculosis, mental illness, alcoholism, epilepsy, drug addiction, when the patient is confined to institutions for treatment or ought so to be.

3 - Operations or treatment for beautifying purposes, and conditions not detrimental to bodily health.

Benefits under this plan provide payment for the following services in office, hospital or home: diagnosis; medical care during illness and of the type usually provided by the physician chosen; confinements, including prenatal and postnatal care; consultation, when authorized by the P.S.I. corporation; treatment of fractures and dislocations; x-ray, including cystoscopic and bronchoscopic x-ray, but not to exceed \$35 in any one period of 12 months, exclusive of x-rays for fractures and dislocations; administration of anaesthetics, except caudal anaesthesia in obstetrics; inoculations and other preventive medical services; refractions; radiation, physical therapy and other special treatment authorized by the P.S.I. corporation.

Premiums at the time of this survey were as follows:

Employee	\$1.50	monthly
Subscriber and one dependent ..	\$3.50	"
Subscriber and more than one dependent	\$5.00	"

Surgical and Obstetrical Care

Enrolment in this plan is restricted to employee groups of at least five, or 75 per cent of the total group, whichever is the greater. Waiting periods are similar to and exceptions are identical with those in the preceding plan.

Benefits apply to care by a physician in office, home or hospital, and they include: surgical

operations, confinements, including prenatal and postnatal care; treatment of fractures and dislocations; x-ray, including cystoscopic and bronchoscopic examination relative to surgical or obstetrical procedures; anaesthetics relative to surgical or obstetrical procedures, except caudal anaesthetic in obstetrics; treatment of burns and lacerations if the subscriber is a bed patient in an authorized hospital for at least 24 hours and if the use of the operating room is required.

Premiums at the time of this survey were as follows:

Employee	\$0.75	monthly
Subscriber and one dependent ..	\$1.75	"
Subscriber and more than one dependent	\$2.50	"

Surgical, Obstetrical and Medical Care "in Hospital" Plan

This plan combines the benefits of the Blue Cross Plan for Hospital Care (see Chapter III of this section) with the following surgical, obstetrical and medical benefits of P.S.I. applicable when the subscriber is treated in hospital. Minimum enrolment requirements are on a percentage basis, sliding down from 100 per cent in a firm with 100 employees to 60 per cent where there are 200 or more employees.

In the case of this plan there is only one waiting period--both husband and wife must have been subscribers for a continuous period of 10 months before

being eligible for benefits covering childbirth or conditions relative thereto.

In this plan there are no exceptions made regarding illnesses such as alcoholism (or conditions resulting from it), venereal disease, mental disease (including epilepsy and psychoneurosis), unless the patient is confined to a special hospital or institution for the treatment of such conditions.

This plan is essentially an in-hospital plan and conforms with the Blue Cross general requirements for admission, etc., except in the case of fractures and dislocations when treatment given elsewhere than in hospital is paid for by P.S.I. Coverage is as follows: surgery, no waiting period required; confinements after 10-months' membership by husband and wife; fractures and dislocations in or out of hospital; administration of anaesthetics, except caudal and dental; cystoscopy and bronchoscopy, but not for diagnosis; burns and lacerations; consultations, one per admission; deep x-ray and radium therapy for malignancy, up to \$150.00 per certificate year; medical care, hospital illnesses only and up to 51 days in any one certificate year.

Rates for Blue Cross are as already given for payroll deduction groups. The additional medical coverage was offered at the following extra rates at the time of this survey:

Single subscriber	\$1.00	monthly
Subscriber plus one dependent ..	\$2.25	"
Family	\$3.10	"

CHAPTER V

ASSOCIATED MEDICAL SERVICES INCORPORATED

This nonprofit organization was established in 1937 to provide a combined medical and hospital care coverage for individual subscribers. Group coverage was introduced in 1946; and in 1949 a new individual plan, the "1600 Plan" was introduced to replace the original type of contract.

As of Dec. 31, 1950, Associated Medical Services reported 31,374 individuals covered under the "1600" and "900" plans (all but 1,632 under the former), and 55,379 employees and their dependents covered on group contracts through their places of employment. These figures are for the whole of the A. M. S. operation in Canada, and they include approximately 1,175 persons on individual contracts who were not resident in Ontario, and an estimated 1,000 group subscribers who should be eliminated from the Ontario count. It is estimated, therefore, that all A. M. S. plans covered approximately 84,000 residents of Ontario at the close of 1950.

A. M. S. 1600 Plan

The "1600 Plan" is so called because it provided that each subscriber and dependent covered can receive benefits up to the amount of \$1,600 in any consecutive 12-month period.

Any resident of Canada who is under the age of 55 years and in good health is eligible to make application. If married, such application must be made also for all members of the immediate family (husband, wife, unmarried sons and daughters under the age of 17 years).

Pre-existing conditions and conditions not interfering with bodily functions are among the exclusions. All applicants to this plan are subject to a two-month waiting period before they are entitled to any benefits; and for certain conditions the waiting period is longer. In the case of growths, thyroid conditions, ulcers, hernias and certain other conditions, the waiting period is six months; in maternity cases and abnormal conditions relating to pregnancy, the waiting period is 10 months; for removal of tonsils and adenoids it is 12 months; for menopausal and prostatic conditions two years.

Benefits under this plan were reported at the time of this survey as follows: physicians' care while in hospital; surgery in or out of hospital; anaesthetics; medical care for proven fractures; childbirth in or out of hospital; x-rays for proven fractures in or out of hospital; hospitalization allowance up to \$9 per diem; maximum overall coverage of \$1,600 per person per year. This contract protects

the subscriber while travelling, wherever the services of a registered medical practitioner are obtained.

Premium rates on this contract at the time of the survey were as follows:

Single subscriber (17 years and over)	\$2.00 per month
Family of two	\$3.75 " "
Family of three	\$5.25 " "
Family of four	\$6.50 " "
Each additional dependent	\$1.00 " "

A. M. S. 900 Plan

This is essentially the "1600 Plan" without hospitalization benefits. It is so named because those covered under this contract may receive benefits up to the amount of \$900 per person in any consecutive 12-month period.

Eligibility, exclusions and waiting periods are identical with those of the "1600 Plan"; and benefits allowed for medical care are the same. The only difference is that no allowance is made to cover the cost of hospital accommodation.

Premium rates on this contract were reported as follows:

Single subscriber	\$1.30 per month
Family of two	\$2.60 " "
Family of three	\$3.60 " "
Each additional dependent	\$0.75 " "

A. M. S. Group Medical Service Plan

This group plan, first offered in 1946, provides for doctors' services while in hospital for medical, surgical, consultative and radiological work, and for the services of an anaesthetist.

Benefits provide a \$50 allowance for maternity and pregnancy care either in or out of hospital; care for proven fractures in or out of hospital; and suturing in or out of hospital. Hospital allowances are optional, with benefits of \$7 per diem for medical and surgical conditions; \$6 per diem for obstetrical care; and a \$10 allowance for each use of the operating room. This hospital allowance does not cover the first two days unless an operation is required.

Maximum hospitalization benefit is 100 days per person in each 12-month period; and with these special limitations--normal maternity cases,

8 days; Caesarean section, 10 days; miscarriage or abortion, 2 days.

were:

Premium rates at the time of this survey

Maximum allowance for doctor's services on behalf of the subscriber and each dependent is \$800 in each consecutive 12 months.

There is a 10-month waiting period on maternity coverage otherwise contracts begin at the first of the month following enrolment.

	<u>Without Hospitalization</u>		<u>With Hospitalization</u>	
Single employee. .	\$0.70	per month	\$1.10	per month
Employee and one dependent	\$1.65	" "	\$2.95	" "
Employee and more than one dependent . .	\$2.40	" "	\$3.70	" "

CHAPTER VI

COOPERATIVE PREPAYMENT PLANS

The Rochdale Hospitalization Plan, established in Oxford County in 1943, was the first of the 39 cooperative hospitalization and surgical benefit organizations which had become associated with the Co-operative Medical Services Federation, Toronto, by Dec. 31, 1950.

The 39 cooperative organizations in existence at the time of this survey had some 41,000 members and offered protection to 124,200 members and dependents.

These plans are primarily rural in their membership, favoring organization by geographic units--counties, school sections or concessions. There are, however, urban memberships in Woodstock, Hamilton and Toronto, one of the largest being the Cumba Co-operative Health Service, which had a membership of about 11,000 at the end of 1950. Some groups were on a club or employment group basis.

The various county and district organizations are voluntarily federated under the Co-operative Medical Services Federation, although they remain autonomous with respect to benefits offered and premiums levied.

General Pattern of Benefits

Benefits offered under the cooperative arrangements conform broadly to a common pattern which may be summarized as follows:

Hospital accommodation, either public ward or semi-private, at a cost not to exceed a fixed amount (\$3.00 to \$4.50 per diem for public ward and \$4.00 to \$8.00 for semi-private). Number of days hospitalization permitted in the contract year ranges from 31 to a variable number dependent upon length of membership (achieving a maximum after 15 years of 205 or 210 days of active treatment hospital care). The usual figure appearing in these contracts is 31 days.

Use of the operating room, anaesthesia equipment and materials; dressings and plaster casts; ordinary drugs and medications (some now

provide penicillin and other special drugs, glucose, saline and oxygen therapy up to a total specified amount, usually \$10 to \$25 in any one hospitalization); electrocardiographic films; routine clinical pathology and biochemistry services; interne service if available; basal metabolism tests; emergency service only following an accident; x-rays in cases of accident emergencies limited to \$25 (available in the higher priced plans only); maternity care (limited as to duration and costs and after 12 months of membership).

Certain exemptions from benefits are usually listed in these co-operative contracts--Workmen's Compensation cases, venereal diseases, veteran's care, tuberculosis, mental disease, abortion, and attempted suicide. Waiting periods are stipulated for certain elective surgical operations such as tonsillectomy, herniotomy, and pelvic repair.

At least one of the urban plans also has a surgical benefit contract providing payment for: surgical operations; confinements (in or out of hospital) including prenatal and postnatal care; diagnostic x-rays up to \$25 per year; cystoscopic examinations; treatment of fractures and dislocations; treatment of burns, bruises, lacerations and sprains when treated in the operating room and if, of necessity, confined as a bed patient for at least 24 hours; and the assistant at operations.

Range of Premiums Charged

Rates of these cooperative plans vary within the following limits:

- (1) Plans paying \$6 to \$8 per diem for room plus other detailed benefits--\$24 to \$30 per family per year;
- (2) Plans paying \$4.50 per diem for room plus other detailed benefits--\$17 to \$20 per family per year;
- (3) Plans paying \$3 per diem for room plus other detailed benefits--\$12 to \$15 per family per year.

CHAPTER VII

WINDSOR MEDICAL SERVICES INCORPORATED

Organized by the Essex County Medical Society in 1937, this plan was granted a charter as a nonprofit corporation and began operations in July, 1939. It is now sponsored by the Essex and Kent County medical societies and has been endorsed by the Ontario Medical Association. The board includes both medical and nonmedical members, and it serves Essex and Kent counties and a part of Perth County. The Windsor plan at the time of this survey allowed payment to doctors at 90 per cent of the total account.

There were no income limits for subscribers, provided they could join through a group; and extra billing by either specialist or general practitioner was not allowed if the subscriber was a single man with a gross income less than \$3,000 per year, or married with an income of less than \$6,500. When a patient's income exceeded these limits, doctors were permitted to send extra bills direct.

Two contracts were offered as outlined below.

Surgical and Obstetrical Contract

This was first offered in 1945 to groups of five or more. It provided the following benefits: surgical services; treatment of fractures and dislocations including x-ray; diagnostic x-rays up to \$35 per year and exclusive of x-rays for fractures and dislocations; anaesthetists and assistants at operations; confinements; cystoscopy and bronchoscopy. There was a 10-month waiting period for elective surgery.

Premiums for this contract were:

Male employee.....	\$0.90	per month		
Female employee.....	\$1.35	"	"	
Employee, spouse and unmarried children under 18 years	\$2.25	"	"	

There were 1,560 enrolled under this plan as of May, 1950.

Complete Medical Plan

This plan had an enrolment of 87,000 by September, 1950, and it offered the following benefits; office, home and hospital service for all types of illness; surgical procedures; x-rays; anaesthetists and operative assistants; confinements, including prenatal and postnatal care; electrocardiograms and basal metabolism tests; consultations with specialists; annual medical examinations; and optical refractions once a year.

For chronic and pre-existing conditions, including elective surgery, there was a waiting period of six months; for confinements and complications of pregnancy, 10 months. Enrolment was by groups of not fewer than 15. There was provision under this plan for carrying on a contract on a pay direct basis after a subscriber leaves employment with the group in which he enrolled. There were 6,391 of these pay direct contracts in force in September, 1950--included in the total enrolment of 87,000 noted above.

Premiums for this plan were:

	<u>Group</u>	<u>Pay Direct</u>
Subscriber	\$1.85 per month	\$2.00 per month
Spouse	\$1.85 " "	\$2.00 " "
First child	\$1.30 " "	\$1.50 " "
Second child	\$1.10 " "	\$1.25 " "
Third child	\$0.90 " "	\$1.00 " "
Fourth child	No charge for additional children	\$1.00 " "
Fifth child		No charge for additional children
Adult dependent	\$1.85 per month	\$2.00 per month

CHAPTER VIII

PREPAYMENT PLANS IN NORTHERN ONTARIO MINES

A number of mines in northern Ontario have developed their own arrangements for the prepayment of hospital and medical expenses. The examples which follow involve a participating contract toward which both employer and employee make contributions. The three plans summarized in this chapter represented protection against hospital and medical expenses for some 20,650 persons (employees and their dependents).

Hollinger Employees' Medical Services Association

This plan, organized at Timmins in 1937, is sponsored by the employees of Hollinger Mine with the assistance of the management. Its board of directors comprises two employee representatives, one mine management representative, and two physicians; and in addition there is an employees' committee of nine members and a medical advisory committee of five, elected by the member doctors in conjunction with the medical supervisor. At last report, there were 2,100 employees enrolled, who with their dependents represented 7,450 persons covered. Expenditures total about \$120,000 annually, and costs of administration run to about five and one-half per cent.

Benefits of the Hollinger plan include the following: medical and surgical services in the home, office or hospital; public ward hospitalization with no limit as to the number of days; necessary x-rays in or out of hospital; services of special nurses and also V.O.N. service in the home; a limited list of special drugs such as penicillin, insulin, oestrogenic substances, streptomycin, and liver preparations; laboratory services such as basal metabolism tests, electrocardiograms and general pathology services in or out of hospital; services of specialists and necessary public ward care in hospital in outside centres where patients may be sent under direction of the medical committee and the medical supervisor.

Rates at the time of this survey were:

Single man	\$2.00 per four-week period (13 periods per year)
Married man	\$3.15 per four-week period (13 periods per year)

Effective July 15, 1950, an additional assessment was made of 35 cents per period for single men and \$1.00 per period for married men; and this assessment is to be continued, reduced or reimposed at the direction of the board of directors and depending upon the financial condition of the association. There is also a surcharge to the subscriber of 50 cents for each home or office call, up to a maximum of \$3.00 per period.

The mine management contributes \$1.10 per period per member.

Porcupine Mines Employees' Medical Services Association

Organized and operated in the same way as the Hollinger Association, this plan reported an enrolment of 3,700 employees of 10 producing mines, who with their dependents comprised a group of 12,000 people. Its board of directors is made up of three employee representatives, one mine management representative, and three doctors. Coverage offered is identical with that of the Hollinger Association, but the Porcupine group operates on a monthly basis rather than by four-week periods.

Ross and Young-Davidson Mines

Two other mines under the control of Hollinger Consolidated Gold Mines Ltd., Ross and Young-Davidson, both have plans similar in coverage to the Hollinger Association plan. In both cases it was reported that there were 150 employees covered. With dependents the total number of persons covered would have been about 1,200.

CHAPTER IX

GROUP HOSPITAL-MEDICAL INSURANCE PLAN OF THE FEDERAL PUBLIC SERVICE

During 1950 four Canadian commercial insurance companies jointly presented a group hospital and medical insurance plan to the federal civil servants of Canada. These four companies are: Confederation Life Association, The Great-West Life Assurance Company, The London Life Insurance Company, and The Mutual Life Assurance Company of Canada. The plan is administered by the latter company. It went into operation Dec. 1, 1950.

All men and women employed in any branch or department of the Public Service of Canada are eligible to participate, six months' service being a requirement before their application is effective. Subscribers who became members of the plan when they were first eligible, or who have been members for at least 10 years, may continue to subscribe after superannuation. Married members are required to enroll their dependents (spouse and unmarried children under 21 years).

Benefits of this plan are payable only with respect to a nonoccupational accident or sickness, that is, where there is an accident or a sickness not provided for under any Workmen's Compensation Act or similar compensation arrangement. Hospitalization benefits are payable if the insured is confined as a patient, with the approval of a licensed physician, in a licensed hospital. Except in the case of emergency treatment, confinement to hospital must be for a minimum of 18 consecutive hours if hospitalization benefits are to be payable.

Benefits Under Federal Public Service Plan

Benefits under this plan may be summarized as follows: hospitalization up to \$6 per diem, with a maximum of \$420 for any one period of disability; payment up to a maximum of \$60 in any one period of hospitalization to cover special hospital services including the anaesthetist's fee; surgical benefits up to the maximum specified on the plan's schedule of operations (where more than one operation is performed during one period of disability, the maximum payable for all operations is \$200); medical benefits include payments up to \$3 per physician's visit to the

insured in hospital during the period for which the hospital benefit is payable, and up to a maximum of \$100 for any one period of disability (where the surgical benefit fee applies, it is intended to include the physician's visits on or after the date of the operation); during the 31 days following discharge from hospital after at least seven days' confinement, provision is made for three appointments with the attending physician--\$3 per house call, \$2 per office call; applicable only to the wife of a member of the plan, the maternity benefits provide a maximum of \$50 for hospital care and \$50 for delivery of the child or children (other benefits up to \$100 are payable in the event of abnormal conditions).

Partial benefits are also obtainable under this plan in cases where employees may be entitled to benefits under a compulsory provincial or municipal hospitalization plan. In such cases, where the hospitalization part of this contract is not applicable, a special benefit up to \$15 is provided to cover the services of an anaesthetist in the event of an operation.

Schedule of Contributions

The following rates applied at the time of this survey to active members of this plan:

	With Hospitalization	Without Hospitalization
Without dependents.....	\$1.60 per month	\$0.80 per month
With dependents	\$5.50 " "	\$3.00 " "

After superannuation, the following rates were applicable in the case of subscribers continuing to qualify for membership in the plan:

	With Hospitalization	Without Hospitalization
Without dependents.....	\$2.40 per month	\$1.20 per month
With dependents	\$6.65 " "	\$3.70 " "

CHAPTER X

PREPAID HOSPITAL AND MEDICAL PLANS UNDER SOME OTHER AUSPICES

Accident and Sickness Companies

At the time of this survey the total number of persons in Ontario who were covered by accident and sickness insurance underwritten by commercial companies was not known. Five of the larger companies writing business in this field, however, estimated that their contracts covered some 300,000 individuals.

These companies offer various benefits or indemnities applicable to the costs resulting from accident or sickness. Both hospital and surgical coverage may be included in the contracts. The average amount paid for hospital care varies with the company and the policy, but generally speaking it ranges between \$5 and \$7.90 per diem.

Group Contracts from Life Insurance Companies

The Canadian Life Insurance Officers' Association reported that at the time of this survey there were approximately 600,000 persons--employees and their dependents--covered by group hospitalization contracts issued by member life insurance companies and two associated casualty companies.

The same group of companies indicated that about 550,000 persons were covered by group surgical contracts in addition to hospitalization insurance.

Fraternal and Mutual Benefit Societies

Latest available figures at the time of this survey were for the year ending Dec. 31, 1949, and at that time there were 29,500 certificates in force providing sickness, accident and funeral benefits to members of the central lodges of 20 fraternal societies. There were also some 75,500 members of mutual benefit societies, and an estimated 90 per cent of these memberships involved a form of prepaid sickness coverage.

On the basis of this, the only information obtainable on such coverage in Ontario, it seems a reasonable assumption that the minimum number of persons obtaining some degree of protection against accident and sickness costs at the end of 1949 was 97,450. It seems probable that the number would have been in excess of this had it been possible to obtain an accurate count of all such coverage, including that obtained through the subordinate lodges in other parts of the province.

**REPORT OF THE ONTARIO
HEALTH SURVEY COMMITTEE**

SECTION J

PUBLIC HEALTH SERVICES

(Pages 375 to 416)

J. PUBLIC HEALTH SERVICES

CONTENTS

	Page
Summary	378
Recommendations	387
Chapter I: Development of Public Health Services in Ontario	388
Chapter II: Provincial Health Department Organization	391
Chapter III: Local Public Health Administration	398
Chapter IV: Provincial Assistance to Municipal Public Health Programs	404
Chapter V: Local Public Health Services	406
Chapter VI: Training of Public Health Personnel	408
Chapter VII: Medical Services in Industry	414
Chapter VIII: Ontario's Changing Age Pattern	415
Chapter IX: Voluntary Organizations	416

PUBLIC HEALTH SERVICES

SUMMARY

In the province of Ontario, with some 412,582 square miles and a population in excess of $4\frac{1}{4}$ millions the task of supplying public health services is a formidable one. Ontario has a land area of 363,282 square miles and an average density of population of 12.13 per square mile, ranging all the way from .24 per square mile in the lakehead zone (including Patricia portion), to 690 per square mile in the Zone which includes York, Peel, and Halton counties.

According to the Ontario Bureau of Statistics and Research, there were 1,190,300 households ("a single person or a group living in one housekeeping community") in the province in 1948; and these are scattered across 959 incorporated municipalities and 11 territorial districts. The distribution of the households by regions and counties is shown in Table J12. Bringing health services, primarily of a preventive and educational nature although including some treatment, within reach of these people, wherever they may live, is a public health job. Inevitably this has been done more successfully in some parts of the province than in others; but gradually the geographic and economic barriers in the way of this work are being overcome.

The provincial Department of Health spent \$24,044,552.69 during the fiscal year ended March 31, 1950; and an additional \$15,781,376.17 was paid out of the Hospital Aid Fund in building and maintenance grants to public hospitals and tuberculosis sanatoria. The Department of Health paid \$7,465,250.00 into the Hospital Aid Fund, which amount is included in the \$24,044,552.69 total expenditure noted above (\$4,015,250.00 is entered as an expenditure of the Division of Tuberculosis Prevention, and \$3,450,000.00 is entered under the Public and Private Hospitals Division). Therefore, the total expenditures of the Ontario Department of Health during the fiscal year ended March 31, 1950, and including building and maintenance grants paid to public hospitals and sanatoria, amounted to \$32,360,678.86.

The Hospital Aid Fund has been abolished (see Volume I, Section A, Chapter II, Report of the Ontario Health Survey Committee), and grants to hospitals and sanatoria are now made through the Ontario Department of Health out of the Consolidated Revenue Fund.

Of the total expenditure of \$32,360,678.86, more than 50 per cent was spent on fewer than 29,000 persons--patients in Ontario mental hospitals and tuberculosis sanatoria. In other words, less than one per cent of the population received the benefit of more than 50 per cent of the total provincial health expenditures. The mental health service is by far the

most costly of the public health services. Approximately 80 per cent of all expenditures of the Ontario Department of Health for salaries in the fiscal year ended March 31, 1950, was for mental hospital employees. In May, 1951, full-time employees in the mental hospitals division numbered 4,186 of the 4,795 total in the Department of Health.

This is not to suggest that too much was spent on either of these groups of patients. Section B of Volume I of this report, dealing with mental health facilities and services, pointed out the need which exists for additional mental hospital beds, psychiatrists and mental health clinics to bring the service up to minimum standards. (The care of tuberculosis patients presented a more satisfactory picture as can be seen in Section G, Volume II).

At the time of this survey, there were two distinct types of local public health administration, the local boards of health of individual municipalities, and the health unit. In 1948 the latter, comprising one or more municipalities by virtue of their form of organization and administration, received \$440,744.60 in provincial assistance (an amount equal to approximately 70 per cent of their own expenditure on public health measures). (In the fiscal year 1949-50 this provincial assistance amounted to \$454,679.92.) The former, municipalities not organized into health units, received no such grant, although both may be supplying the same kind of service to their residents. In Chapter IV, this section of the report goes on to point out that the province by spending another \$1 $\frac{1}{2}$ millions could put its grants in aid of municipal public health services on a more equitable basis.

Public health programs have over the years received substantial assistance from various voluntary associations. Many groups both large and small are working unceasingly in the interests of the health of Ontario's people. To set down the actual sum of money their various activities absorb in a given year would be difficult, because some of the voluntary organizations are provincewide in coverage, many are local, and several are national in character and do not assess the proportion of their activities affecting only Ontario.

Some measure of this voluntary public health contribution may be indicated by considering one group, the service clubs. The Survey Committee secured information from 114 service clubs in the province which showed that they had spent \$497,666.69 on health activities in 1948. Some of these clubs have been active for as long as 30 years and they have a

continuous record of contributions to this type of work.

The service clubs and many other voluntary organizations have also contributed an inestimable volume of time and energy to the raising of the general level of health in the province.

Public health, concerned as it is with the health of every member of the public, is universal in scope and impact. Everybody benefits by its improvement, and everyone suffers if the effort to improve the general level slackens. It has heavy economic as well as social implications; and for this reason too much stress cannot be laid upon its efficient organization and administration. Judging from the paucity of information which some of the voluntary organizations were able to supply to the Survey Committee, and in the absence of any system of reporting to the government, it is difficult to be satisfied that the monies donated by or collected from the public are always spent to the greatest public benefit (see Volume I, page 105).

The public, which in the last analysis pays the bill and which stands to gain or to lose by the efficiency of public health services, has the right to assurance that its best interests are being served in the vast and complex field of public health.

Information relating to the health problems created by motor vehicle accidents is contained in Table J13. In Ontario, during the year 1950 there were 20,731 persons injured; there were 791 fatal injuries and 19,940 nonfatal injuries. Consideration of the nonfatal injuries as shown in the table reveals the extent to which these accidents increase the load on the treatment facilities of the province. The fact that these cases require immediate emergency service further adds to the strain on hospital facilities and services. Most of the injured persons require at least emergency examination and some treatment. A large proportion require x-ray examination and hospitalization, for example, 326 persons suffered fractured skulls, 86 fractured spines, 3,039 other fractures, 518 concussions of the brain, and 262 internal injuries. A

TABLE J1

CHIEF CAUSES OF DEATH FOR ALL AGES IN ONTARIO, AVERAGE, 1944-1948

Rank	Cause of Death	International List Numbers	Average Annual Number of Deaths	Specific Death Rate Per 100,000 Population	Per Cent of Total Deaths
1	Diseases of the heart	90-95	13,152	319.9	32.4
2	Cancer ^x (all forms)	45-55, 44b, 74	5,777	140.5	14.2
3	Intracranial vascular lesions	83	4,301	104.6	10.6
4	Accidental causes	169-195	2,656	64.6	6.6
5	Pneumonia, bronchitis & influ.	33, 106-109	2,113	51.4	5.2
6	Nephritis	130-132	1,775	43.2	4.4
7	Prematurity	159	1,140	27.7	2.8
8	Tuberculosis (all forms)	13-22	1,001	24.3	2.5
9	Diabetes mellitus	61	981	23.9	2.4
10	Diseases of the arteries	96-99	909	22.1	2.2
11	Congenital malformations	157	739	18.0	1.8
12	Injury at birth	160	389	9.5	1.0
13	Suicide	163-164	360	8.7	0.9
14	Senility	162	335	8.1	0.8
15	Diarrhoea, enteritis & dys.	27, 119, 120	326	7.9	0.8
16	Other dis. peculiar to infancy	158, 161	319	7.8	0.8
17	Hernia & intestinal obstruction	122	296	7.2	0.7
18	Ulcer of stomach & duodenum	117	294	7.2	0.7
19	Diseases of the prostate	137	293	7.1	0.7
20	Syphilis	30	192	4.7	0.5
All other causes			37,348	909.0	92.0
			3,256	79.0	8.0
Total			40,604	988.0	100.0

^x Including Hodgkin's disease, leukaemia, etc.

Source: Medical Statistics Branch, Ontario Department of Health.

proportion of the less seriously injured also needed examination and hospitalization.

The chief causes of death in Ontario are shown in Table J1. The 20 causes listed contributed 92.0 per cent of all deaths recorded during the five-year period.

Causes of Death - Infants

Chief causes of death among infants under the age of one year are shown in Table J1-a. These are based on the average number of deaths from various causes over the years 1944 to 1948.

TABLE J1-a

CHIEF CAUSES OF DEATH AMONG INFANTS UNDER ONE YEAR OF AGE, ONTARIO, 1944-48

Rank	Cause of Death	Average Annual Number of Deaths	Per Cent of Deaths	Annual [*] Specific Death Rate
1	Prematurity	1,140	32.0	12.2
2	Congenital malformations	639	18.0	6.8
3	Pneumonia, bronchitis and influenza	451	12.7	4.8
4	Injury at birth	389	10.9	4.2
5	Other diseases peculiar to early infancy	257	7.2	2.8
6	Diarrhoea, enteritis and dysentery	238	6.7	2.5
7	Accidental causes	114	3.2	1.2
8	Congenital debility	61	1.7	0.7
	Other causes	270	7.6	2.9
	Total	3,559	100.0	38.1

* Rate per 1,000 live births.

Causes of Death - Children and Adults

In preschool age children (one to four years), accidental causes claimed the greatest number of lives (an average of 171, or 28.3 per cent in the years 1944-48). Pneumonia, bronchitis and influenza as a group ranked second with 113 deaths, and this group plus accidents caused nearly half of all deaths among preschool children. Tuberculosis was reported as the cause of 4.5 per cent of all child deaths in this age bracket.

Among school-age children (five to 14 years), accidents caused an annual average of 207 deaths (39.5 per cent of the group total of 524). Tuberculosis ranked second with 41 deaths, and cancer third with 36 deaths. Then followed the pneumonia, bronchitis and influenza group (35 deaths), and congenital malformations (20 deaths).

In the adolescent years, 15-19, accidental causes still ranked first (35.8 per cent of the total). Tuberculosis ranked second with 55 deaths, female exceeding male deaths much the same as at ages five to 14 years. Together these two causes accounted for 50.8 per cent of all deaths at ages 15-19 years. Total deaths from all causes for this group amounted to an annual average of 367 in the period under study.

Accidental causes, tuberculosis and cancer

were the three leading causes in the 20-29 age group. Over one quarter of the annual average of 974 deaths at these ages were attributed to accidental causes with a ratio of six male deaths to every female death. Tuberculosis in second position accounted for 178 deaths or 18.3 per cent of the total. Cancer ranked third with 7.3 per cent of the total. Sixty-two deaths or 6.4 per cent of the total number were attributed to diseases of the heart.

In the 30-39 group, accidents remained the leading cause of death with 211 or 16.0 per cent of the annual average of 1,320 deaths attributed to these causes. The sharp male excess (6:1) still held at these ages. Diseases of the heart in fifth position in the age group 20-29 years, advanced to second position in the age group 30-39 years and accounted for 200 deaths or 15.2 per cent of the total at these ages. Cancer contributed 198 deaths or the annual average of 15.0 per cent; while tuberculosis in fourth place was responsible for an average of 164 deaths per year or 12.4 per cent of the total.

By the ages 40-49 diseases of the heart began to occupy first position. The average annual number of deaths classified attributed to these diseases was 653, over one quarter of all deaths in this age group. Cancer now assumed second place with 529 deaths or 21.4 per cent of the average annual total of 2,467 deaths. Accidental causes, now in third

position, contributed 224 deaths or 9.1 per cent of the total.

Among persons of 50-69 years of age, diseases of the heart, arteries and kidneys were the leading causes of death with cancer in second position. At these ages one death in every five was attributed to cancer. Accidental causes, tuberculosis, pneumonia, bronchitis and influenza follow. At ages 50-69 years male mortality from tuberculosis exceeded that

for females in the ratio of nearly 4:1. At ages 70 and over, 65.4 per cent of all deaths were classified as due to diseases of the heart, arteries and kidneys, followed in importance by cancer, pneumonia, bronchitis and influenza, and diabetes mellitus.

The charts which follow give evidence of the progress which has been made in Ontario in the control and prevention of certain diseases.

TABLE J1-b
CHIEF CAUSES OF INFANT MORTALITY IN ONTARIO
1915-19, 1925-29, 1935-39 and 1945-49

Rank	CAUSE OF DEATH	Average Annual Number of Deaths	Per Cent	Rate Per 1,000 Live Births
Years 1915 - 1919				
1	Congenital debility, icterus, and sclerema	2,999	46.8	46.5
2	Pneumonia, bronchitis and influenza	993	15.5	15.4
3	Diarrhoea, enteritis and dysentery	848	13.2	13.2
4	Convulsions	297	4.6	4.6
5	Congenital malformations	227	3.6	3.5
6	Whooping cough	159	2.5	2.5
7	Meningitis	99	1.6	1.5
8	Tuberculosis (all forms)	55	0.9	0.9
9	Measles	41	0.7	0.6
10	Diphtheria and croup	28	0.4	0.4
	Other causes	659	10.2	10.2
TOTAL		6,405	100.0	99.3
Years 1925 - 1929				
1	Prematurity	1,490	29.0	21.8
2	Pneumonia, bronchitis, and influenza	730	14.2	10.7
3	Diarrhoea, enteritis, and dysentery	609	11.8	8.9
4	Congenital malformations	475	9.2	6.9
5	Congenital debility, icterus, and sclerema	403	7.8	5.9
6	Injury at birth	278	5.4	4.0
7	Other diseases peculiar to early infancy	255	5.0	3.7
8	Whooping cough	136	2.7	2.0
9	Convulsions	89	1.7	1.3
10	Accidental causes	71	1.4	1.0
	Other causes	609	11.8	8.9
TOTAL		5,145	100.0	75.1
Years 1935 - 1939				
1	Prematurity	1,027	31.1	16.2
2	Pneumonia, bronchitis, and influenza	470	14.2	7.4
3	Congenital malformations	430	13.0	6.8
4	Diarrhoea, enteritis, and dysentery	303	9.1	4.8
5	Injury at birth	270	8.2	4.3
6	Other diseases peculiar to early infancy	219	6.6	3.4
7	Congenital debility	121	3.6	1.9
8	Whooping cough	69	2.1	1.1
9	Accidental causes	68	2.1	1.1
10	Diseases of the thymus gland	56	1.7	0.9
	Other causes	274	8.3	4.3
TOTAL		3,307	100.0	52.2
Years 1945 - 1949				
1	Prematurity	1,145	31.0	11.5
2	Congenital malformations	673	18.2	6.8
3	Pneumonia, bronchitis, and influenza	465	12.6	4.7
4	Injury at birth	416	11.3	4.2
5	Other diseases peculiar to early infancy	268	7.3	2.7
6	Diarrhoea, enteritis, and dysentery	264	7.2	2.7
7	Accidental causes	135	3.7	1.4
8	Congenital debility	54	1.4	0.5
9	Diseases of the thymus gland	32	0.9	0.3
10	Whooping cough	25	0.7	0.3
	Other causes	209	5.7	2.1
TOTAL		3,686	100.0	37.2

CHART J1

WHOOPIING COUGH IN ONTARIO

Rates per 100,000 Population

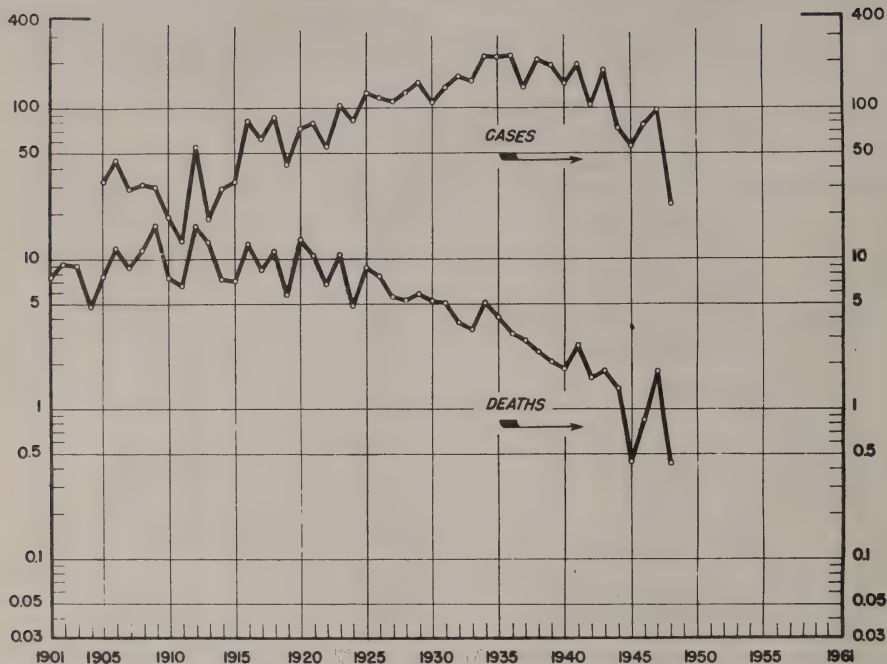


CHART J2

DIPHTHERIA IN ONTARIO

Rates per 100,000 Population

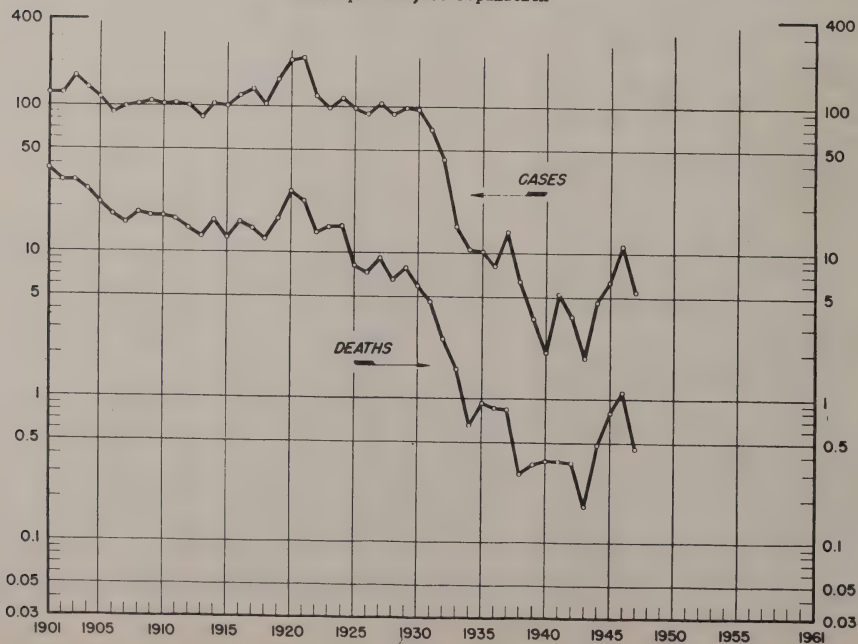


CHART J3
TYPHOID FEVER IN ONTARIO



CHART J4
SCARLET FEVER IN ONTARIO

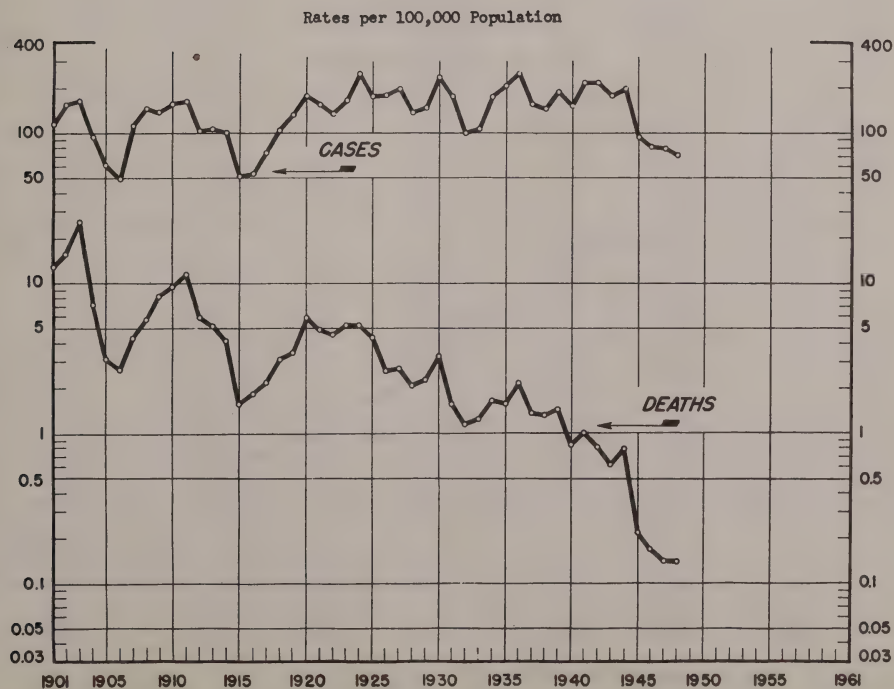


CHART J5
MEASLES IN ONTARIO

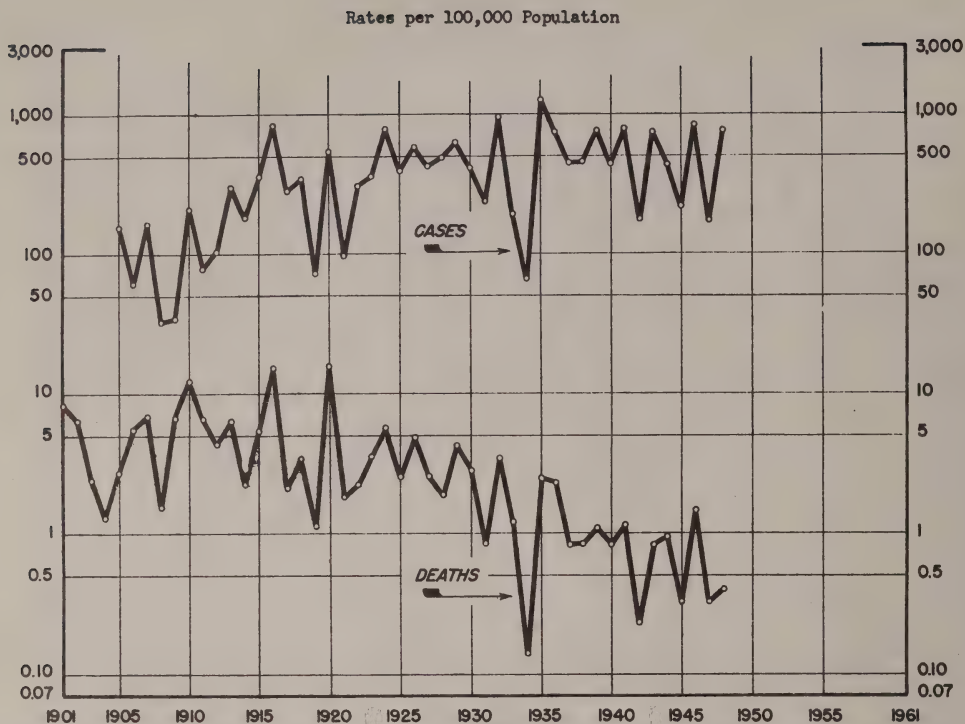


CHART J6
TUBERCULOSIS IN ONTARIO

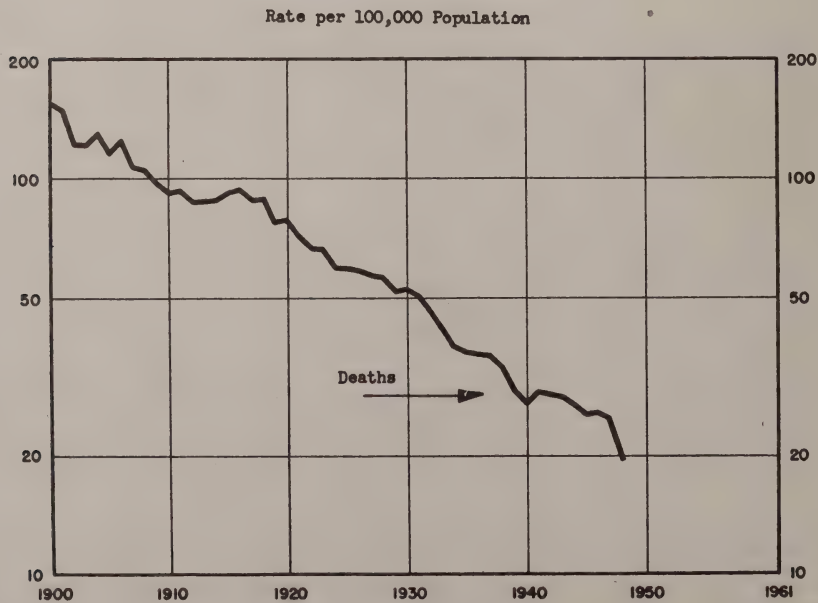


TABLE J1-c

COMMUNICABLE DISEASE STATISTICS FOR ONTARIO, 1901-1949

	Reported Cases		Reported Deaths	
	Number	Rate ^Δ	Number	Rate ^Δ
<u>Diphtheria</u>				
1900-1904	11,967 ^x	133.89 ^x	3,481	31.32
1905-1909	12,041	100.78	2,186	18.30
1910-1914	12,496	97.27	2,011	15.65
1915-1919	16,875	121.80	2,008	14.49
1920-1924	22,190	149.14	2,447	16.45
1925-1929	15,374	95.45	1,250	7.76
1930-1934	7,962	45.90	511	2.95
1935-1939	1,522	8.36	118	0.65
1940-1944	678	3.51	68	0.35
1945-1949	1,165	5.55	112	0.53
<u>Whooping Cough</u>				
1900-1904	n. a.	-	868	7.81
1905-1909	4,008	33.54	1,143	9.57
1910-1914	3,500	27.24	1,242	9.67
1915-1919	8,292	59.85	1,229	8.87
1920-1924	11,728	78.82	1,351	9.08
1925-1929	20,076	124.65	1,068	6.63
1930-1934	26,916	155.16	783	4.51
1935-1939	35,185	193.36	523	2.87
1940-1944	26,672	138.19	356	1.84
1945-1949	12,243	58.29	161	0.77
<u>Typhoid Fever</u>				
1900-1904	3,816 ^x	38.16 ^x	2,447	22.02
1905-1909	11,583	96.94	3,188	26.68
1910-1914	9,817	76.42	2,630	20.47
1915-1919	4,259	30.74	1,218	8.79
1920-1924	4,512	30.32	942	6.33
1925-1929	3,760	23.35	497	3.09
1930-1934	2,864	16.51	335	1.93
1935-1939	1,156	6.35	176	0.97
1940-1944	539	2.79	73	0.38
1945-1949	317	1.51	27	0.13
<u>Scarlet Fever</u>				
1900-1904	11,748 ^x	131.44 ^x	1,527	13.74
1905-1909	12,216	102.24	601	5.03
1910-1914	16,053	124.96	927	7.22
1915-1919	11,502	83.02	330	2.38
1920-1924	26,011	174.82	765	5.14
1925-1929	26,743	166.04	443	2.75
1930-1934	27,034	155.84	306	1.76
1935-1939	33,879	186.18	288	1.58
1940-1944	36,940	191.39	155	0.80
1945-1949	16,065	76.49	31	0.15

^Δ Rate per 100,000 of population.^x These figures are for the four-year period 1901-1904.^x These figures are for the three-year period 1902-1904.

TABLE J1-c (Cont'd)

COMMUNICABLE DISEASE STATISTICS FOR ONTARIO, 1901-1949

	Reported Cases		Reported Deaths	
	Number	Rate [★]	Number	Rate [★]
<u>Measles</u>				
1900-1904	n. a.	-	552	4.97
1905-1909	8,399	70.30	562	4.70
1910-1914	22,599	175.92	811	6.31
1915-1919	50,875	367.19	741	5.35
1920-1924	62,162	417.78	713	4.79
1925-1929	81,225	504.31	523	3.25
1930-1934	62,985	363.09	290	1.67
1935-1939	131,629	723.36	278	1.53
1940-1944	98,295	509.27	153	0.79
1945-1949	91,615	436.22	139	0.66
<u>Tuberculosis</u>		<u>Tuberculosis</u>		
Records in the Tuberculosis Prevention Division show newly discovered active cases of tuberculosis reported to the Ontario Department of Health for the four-year period 1947-50 as follows:		1900-1904	15,021	135.15
		1905-1909	12,999	108.80
		1910-1914	11,528	89.74
		1915-1919	12,219	88.19
		1920-1924	10,154	68.24
		1925-1929	9,015	55.97
		1930-1934	7,925	45.68
		1935-1939	6,357	34.93
1947 - 1,468 1949 - 1,429		1940-1944	5,373	27.84
1948 - 1,433 1950 - 1,687		1945-1949	4,622	22.01

★ Rate per 100,000 of population.

PUBLIC HEALTH SERVICES

RECOMMENDATIONS

It is recommended that, -

- 1 - A policy respecting provincial health grants be adopted which will ensure that the grants will be made to municipal boards of health and to health units on an equitable basis, and that the basis of the grants be published in the regulations (Chapter IV).
- 2 - A comprehensive, uniform and audited system of reporting on the activities, expenditures and revenues of all municipal boards of health and health units and a system of inspection be adopted by the Ontario Department of Health.
- 3 - Local boards of health and school boards be encouraged to improve the teaching of health, the supervision of student health, and the accommodation for health service facilities in the schools themselves.
- 4 - A ready reference index to the legislative handbook issued by the Ontario Department of Health be prepared annually for the guidance of medical officers of health and their staffs.
- 5 - Arrangements be made to provide promptly to medical officers of health such essential information on births and deaths as will assist them in the discharge of their duties.
- 6 - The application form for medical examination of expectant mothers be revised to include notification to the person examined that this one prenatal examination is provided free under section 74 (a) of the Public Health Act.
- 7 - The Ontario Department of Health re-establish a division of health education to coordinate the public health education projects of other divisions, and to assist official and other agencies in community health education.
- 8 - The Ontario Department of Health consider the improvement of training programs for sanitary inspectors (Chapter VII).

CHAPTER I

DEVELOPMENT OF PUBLIC HEALTH SERVICES IN ONTARIO

What would appear to be the earliest attempt to regulate matters pertaining to health in Upper Canada was the act passed in 1849 to permit the functioning of a central board of health to deal with threatened outbreaks of cholera.

The first Public Health Act in Ontario, following the creation of the province by the B. N. A. Act of 1867, was that passed on the 29th of March, 1873. This act empowered the Lieutenant-Governor to establish a central board of health "if a serious outbreak threatened".

These two acts were apparently emergency measures only, made necessary by the frequent scourges of epidemic disease. In 1882 legislation of a more permanent character was introduced in Ontario by the Public Health Act of that year which established a provincial board of health.

The board, consisting of seven members, four of whom were required to be registered medical practitioners, was authorized to urge municipalities to appoint health officers or local boards of health. The provincial board, however, had no power to enforce such action.

This situation failed to produce satisfactory results, and certain deficiencies in this and previous legislation, were corrected by the Public Health Act of 1884 which gave authority to the provincial board "to make regulations for the prevention or mitigation of disease and for all matters relating thereto" and outlined the powers and responsibilities of local boards of health.

This act established certain principles which are still in effect in the province. The local boards were required to provide special hospitals for infectious disease, to report smallpox, diphtheria, scarlet fever, cholera and typhoid to the provincial board. They were also made responsible for the control of nuisances and the prevention of the sale of impure or polluted foods. Municipalities were required to submit plans for public water supplies and sewage systems to the provincial board for approval.

Within a year of the passing of this act, 400 local boards had been established. By 1890, the total had risen to 576 boards, with 356 medical officers of health.

At this period in Ontario's health history, widespread interest had been aroused in bacteriological discoveries. In 1890, a provincial public health laboratory was opened in the city of Toronto--said to be

the first bacteriological laboratory of its kind on the North American continent.

As provincial services increased, they were organized into "divisions" under the Provincial Board of Health which was attached to the Department of the Provincial Secretary and later to the Department of Labour. In 1925, the Provincial Board of Health was reorganized and given full departmental status as the Ontario Department of Health.

In 1882 the board had a part-time secretary and a yearly budget of \$4,000. By 1938 the work had expanded to the point where there were eight administrative divisions and the active participation of 900 medical officers of health, with their respective local boards. By 1948, there were 12 administrative divisions.

The province of Ontario has initiated a number of advances in the public health field in Canada. Free distribution of biological products was among the early developments. In 1938 the pasteurization of milk was made compulsory in all cities and towns and certain other designated municipalities. This legislation is now in force in practically the entire province. Also in 1938, the province relieved municipalities of any payment for cost of treatment of patients in sanatoria. (In 1949, the province paid on the average, \$4.22 per day for the treatment of each patient in a sanatorium.) In October, 1946, an initial complete examination was made available, without charge, to every expectant mother in the province. In 1935 the Ontario government arranged to pay for medical services to residents of the province who are in receipt of mothers' allowance, old age and blind pensions and direct relief (see Chapter II, Section I of this volume).

There are 378 municipal water supplies in Ontario. One hundred and sixty-three of these supplies are chlorinated, while 71 are both chlorinated and filtered.

There are 132 municipalities in the province served by 176 sewage disposal plants. Certain municipalities have more than one plant. In addition, there are 61 plants serving institutions such as hospitals and factories; 44 plants serving military camps; and 24 waste treatment plants serving certain dairies, tanneries and factories.

Fifty-one sewage disposal plants have been constructed since 1945. In addition, 60 plants were being planned by municipalities for construction at an early date.

As provincial and local governments have increased their services over the years and have extended protection not only to the healthy but to the afflicted as well, and in many instances formed a valuable liaison through their agencies with various voluntary groups, public health has come to mean not only the safeguarding of the public against disease but the provision of certain treatment services as well.

In preparing its report on public health in the province, the Survey Committee has taken into consideration the expansion in both preventive and treatment services and has used the following definition:

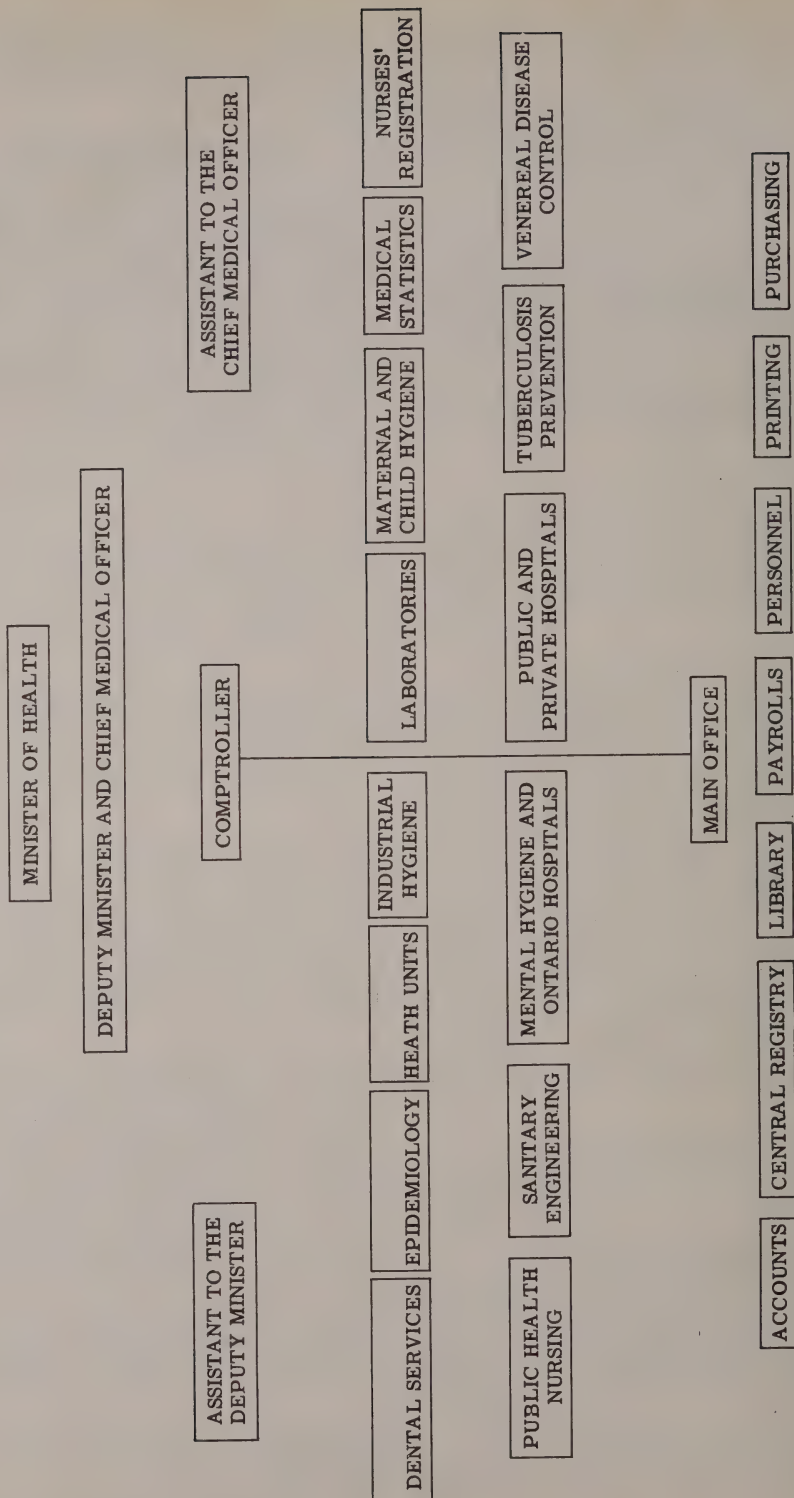
"Public health services comprise the

collective health services administered and paid for in whole or in part by local, provincial or federal governments and, in addition, health services organized or provided by voluntary or community effort".

Public health administration in Ontario is partly provincial and partly municipal. The provincial administration is vested in the Ontario Department of Health as described in Chapter II. The municipal health administration is vested in either municipal boards of health or in the boards of health of "health units" and is described in Chapter III. In most of the public health legislation, administrative powers are vested in the local boards of health with a proviso that the powers may also be exercised by the officers of the provincial department of health.

CHART J7

ORGANIZATION OF THE DEPARTMENT OF HEALTH, PROVINCE OF ONTARIO as of December, 1950



CHAPTER II

PROVINCIAL HEALTH DEPARTMENT ORGANIZATION

In 1948 the Deputy Minister of Health, who was also the Chief Medical Officer, served as a general administrator of the department and coordinator of its several services. The business administrator, while doing work for the department as a whole, was attached to the Division of Mental Hygiene and Ontario Hospitals.

Offices serving the department generally - Medical Statistics, Library, Solicitor's Office, Central Registry, Purchasing and Accounting - were all grouped with the main office, together with the Public and Private Hospitals Division and the Medical Inspectors of Public and Private Hospitals.

In 1948 there were 12 special divisions of the department, each in the charge of a director. By 1950 there were 14 divisions as follows:-

- Division of Dental Services
- Division of Epidemiology
- Division of Industrial Hygiene
- Division of Laboratories
- Division of Maternal and Child Hygiene
- Division of Medical Statistics
- Division of Mental Hygiene and Ontario Hospitals.

- Division of Nurses Registration
- Division of Public Health Administration
- Division of Public Health Nursing
- Division of Public and Private Hospitals
- Division of Sanitary Engineering
- Division of Tuberculosis Prevention
- Division of Venereal Disease Control

In May 1951, there were 4,795 full-time and approximately 225 part-time employees in the Ontario Department of Health. Of the total full-time staff, 4,186 were employed in the Ontario Mental Hospitals Division; 293 in the central laboratory and 316 in the other divisions.

Activities of the various divisions are summarized below.

Division of Sanitary Engineering

Activities include supervision of all municipal waterworks systems, with particular attention to treatment plants, control of stream pollution, supervision of sewage treatment, refuse collection and disposal, milk processing and food plants, assistance to municipalities in the enforcement of sanitation regulations governing public eating places, sanitary inspection and licensing of summer camps, frosted

food locker plants, administration of cemetery regulations, and advice to local health agencies and assistance to them in meeting their sanitation problems.

Division of Tuberculosis Prevention

The division is responsible in a general way for all measures relating to prevention, treatment and rehabilitation in the field of tuberculosis. The work of this division includes the administration of 183 chest clinics, (all but 10 of which were free to the public in 1948), located in 163 centres of population, and distribution of grants to the province's 14 sanatoria. Compilation of statistical data on tuberculosis morbidity, mortality and sanatorium admissions is also a division responsibility. (See Section G, Volume II, Report of the Ontario Health Survey Committee).

During 1948 a grant of \$740,000 was made available by the federal government to increase Ontario's tuberculosis control program by (1) providing streptomycin free to all sanatorium patients recommended for this treatment, (2) equipping hospitals having an admission rate of more than 1,200 patients per year with chest x-ray machines, (3) paying for x-ray equipment in certain clinics where the volume of work warranted it, (4) providing a mobile x-ray unit with maintenance and staff.

Division of Maternal and Child Hygiene

The division acts in an advisory capacity to municipalities and local boards of health regarding maternal and child hygiene programs. It administers section 74 (a) of the Public Health Act, under which every expectant mother in Ontario is entitled to one free complete medical examination. In 1948 the number of such examinations (52,305) equalled about half the number of live births recorded (104,169), and this prenatal service cost approximately \$300,000.

Medical examination of applicants to nine normal schools operated by the Department of Education, preparation and publication of a book on baby care ("The Baby", revised, 1948), an advisory service to nurseries for the newborn and obstetrical units of hospitals are also included among the duties of this division.

Division of Venereal Disease Control

Administration of grants to the 18 venereal disease clinics operated in the province in 1948 by public general hospitals, medical consultation and

laboratory service to physicians and to clinics, maintenance of statistical records of V.D. incidence, epidemiological procedures directed toward the location and examination of suspected contacts, and public education - these are the principal matters falling within the scope of this division.

In 1948, a continuing reduction in V.D. incidence was noted. Clinic attendance for the year was 97,426 - down 36.9 per cent from the peak year, 1946. There was also a marked reduction in the number of drugs requisitioned from the division for treatment by doctors, at special clinics, and in hospital wards. Of the persons reported as V.D. contacts, and of whom adequate descriptions were supplied, 47.8 per cent were located and examined in 1948. Films, a manual on venereal disease for physicians and nurses, a periodical bulletin service to physicians, and large quantities of public information literature were distributed by the division.

Division of Industrial Hygiene

A staff including physicians, engineers, chemists, industrial public health nurses, and sanitary inspectors deals with the two chief functions of this division - study and control of occupational diseases; and the development of health services in industry. A library and laboratory are maintained by the division.

Besides examining industrial workers and the conditions under which they work, the division serves in a consulting capacity to the Factory Inspection Branch, Ontario Department of Labour, the Workmen's Compensation Board, the Industrial Accident Prevention Association, and to private employer and employee groups and individual physicians. Chest x-ray of industrial groups comes under this division with a nominal charge per film being made to employers.

The Division of Industrial Hygiene also is responsible for the Ontario Civil Service Health Centre, operating it primarily as a service to civil servants and secondarily as a model unit for industrial demonstration. At the time of this report, the latter purpose was hindered by lack of proper accommodation and overcrowding.

Division of Laboratories

Through a central laboratory in Toronto, nine regional laboratories and six subsidized laboratories, this division makes service in biochemistry, bacteriology, serology, and pathology available to medical officers of health, private physicians and some hospitals in the province. Special bacteriological tests are made for practising dentists and water tests are done for the general public. During 1948 the division performed 1,415,313 tests.

A special course on mycology was held during 1948 at the central laboratory for most of the laboratory directors in the provincial service. This was with a view to expanding the mycology service

to all laboratories in the province. From time to time pamphlets are prepared for distribution to physicians, and a number of special research projects are planned or under way.

Division of Epidemiology

Function of this division is to provide direction and assistance in the control of communicable disease. The director is available for consultation in the diagnosis of the rarer communicable diseases and is prepared to provide assistance in treatment in the event of an epidemic. Weekly records of the incidence of the more important communicable diseases are compiled and made available to medical officers of health, and pamphlets and immunization literature are prepared and distributed.

One of the most important activities of the division is in its distribution of vaccines and antitoxins for the immunization of the people of the province. Net cost of these in 1948 totalled \$162,197.50. Insulin is also distributed - at a net cost of \$51,500.95 in 1948.

This division is responsible for the direction of the poliomyelitis program which includes the cost of hospitalizing first admission cases during the acute stage of the disease and is paid by the province. The cost of transportation to certain government approved hospitals is assumed by the patient.

Division of Public Health Nursing

Professional education, supervising and advising public health nursing services in local health units and departments, and assisting agencies in securing staff are among this division's duties.

In 1948 there were 22 registered nurses in the certified course in public health nursing and seven experienced public health nurses in the advanced course in administration and supervision of public health nursing. A four-week course in psychiatric methods was arranged for five senior public health nurses, and two conferences in family health counselling were held for members of the public health nursing staffs across the province.

Nurses from this division assist with the examination of students attending provincial normal schools operated by the Department of Education.

Division of Nurses Registration

Administration of The Nurses Act of Ontario, R.S.O. 1950, c.256, under which registration and certification of nurses and nursing assistants is required, falls to this division.

Three objectives have been set forth for the division:

1 - To standardize conditions under which student nurses receive training.

2 - To establish qualifications for registration and regulate reciprocal registration with other provinces and countries.

3 - To supervise the training program of the provincial government course for certified nursing assistants, and to establish qualifications for certification of nursing assistants (Section F, Volume II, Report of the Ontario Health Survey Committee).

In 1951 two new acts, known as The Nursing Act, 1951, and The Nurses Registration Act, 1951, were enacted. These two new acts are to come into force by proclamation and were not in force at the date of this report. When they are in force they will replace the existing Nurses Act, R.S.O. 1950, c.256.

Under this new legislation The Nurses Registration Act, 1951, will be administered by the Registered Nurses Association of Ontario. The act deals with requirements for admission to schools of nursing, curricula, examinations for nurses, registration of nurses and related subjects.

The Nursing Act, 1951, will be administered by the Ontario Department of Health. It deals with the establishment, maintenance and conducting of schools of nursing and the regulations affecting nursing assistants.

Division of Dental Services

Supervision of the Department of Health grant to local boards for school dental inspection services (equal to 20 to 30 per cent of the cost), operation of a dental service car in Northern Ontario, and consultative services to Ontario mental hospitals, training schools and reformatories constitute the chief responsibilities of this division.

Under the school dental inspection program, 241 school sections, 20 school areas and 33 urban centres had initiated services by the end of 1948. The dental car brought dental attention to more than 1,500 children in the Kenora, Rainy River and Thunder Bay districts during the year. Assistance was also given by the division in experiments in artificial fluorination of municipal water supplies conducted by the National Research Council and the Dental Health Division, Department of National Health and Welfare (Section D, Volume I, Report of the Ontario Health Survey Committee).

Division of Mental Hygiene and Ontario Hospitals

The division is concerned almost exclusively with administration of mental health clinics (four mobile and one stationary) and the 14 mental hospitals operated by the province. There was in 1948 no research program and no public health education program. A principal need, stated by the division, is for increased personnel and a budget large enough to provide for a sufficient number of well-trained psychiatrists. (Section B, Volume I, Report of the Ontario Health Survey Committee).

Public and Private Hospitals Division

Administration of the Public Hospitals Act, the Hospitals Aid Act, the Private Hospitals Act, and the regulations under these acts, is the principal function of this division. This includes, among other duties, the distribution of capital and maintenance grants to public hospitals in the province, examination and approval of architectural plans for new hospitals, and hospital inspection. The latter is one phase of the division's work which has suffered due partly to insufficient staff - for example, only a fraction of the possible 500 to 600 private hospitals and nursing homes in Ontario were inspected and licensed. Needs of the division include more office space, and a budget that would permit the employment of more personnel. (Section A, Volume I, Report of the Ontario Health Survey Committee).

Division of Public Health Administration

This division is responsible for provincial assistance to municipal departments of health and health units, and for encouraging the formation of additional health units. Details on health units are contained in Chapter III of this section.

Administration of fellowships and bursaries for work in public health, sanitary engineering, dental and veterinary public health, and public health nursing also comes under this division.

Medical Statistics Division

The division is responsible for the collection, tabulation and analysis of cancer data recorded by the cancer centres operated by the Ontario Cancer Treatment and Research Foundation, and for the supervision of cancer case recording in these centres. An annual statistical report on cancer is published. The medical statistics division is also responsible for the collection, tabulation and analysis of Ontario mental health and hospital statistics and for the preparation of an annual statistical review. In collaboration with the division of industrial hygiene, the division is developing methods for the collection, tabulation and analysis of morbidity data in industry. The division cooperates with and assists all other divisions of the department in the development and use of vital and public health statistics.

Legislation

A list of the acts administered by the Ontario Department of Health is set out in Table J2. These are the acts which are administered directly by the Minister of Health and the officers of the department. In addition many of these acts confer powers upon local boards of health and their officers.

Table J3 contains a list of acts which are administered indirectly by the Ontario Department of Health. In the case of these acts, the officials of the Department have no responsibility for their administration or enforcement.

Each act contains authority for setting up a separate administrative board. In some cases the board is appointed by the government. In other cases the board is elected by those who are affected by the provisions of the act. Where it is necessary for the administrative board to report to the govern-

ment or to communicate with the government with a view to obtaining changes in the legislation, or respecting other matters arising out of the administration of the act, the board would report to the Minister of Health.

TABLE J2

LEGISLATION UNDER THE JURISDICTION OF THE ONTARIO DEPARTMENT OF HEALTH

DIRECT

The Public Health Act and the following Regulations:

- Bedding
- Construction and Management of Swimming Pools
- Control of Communicable Diseases
- Courses of Instruction and Qualifications for Medical Officers of Health, Sanitary Inspectors and Public Health Nurses
- Eating Establishments
- Expectant Mothers
- Frosted Food Locker Plants
- Fumigation of Premises
- Grants for Dental Inspection in Schools
- Health Units
- Milk Pasteurization Plants
- Pasteurization of Milk
- Respecting Camps, Works and Premises, and the employers and workmen thereof in territorial districts without municipal organization
- Summer Camps
- Supply of Insulin

- The Cemetery Act and Regulations
- The Maternity Boarding Houses Act
- The Mental Hospitals Act and Regulations
- The Nurses Act and Regulations
- The Private Hospitals Act and Regulations
- The Private Sanitaria Act
- The Psychiatric Hospitals Act
- The Public Hospitals Act and Regulations
- The Sanatoria for Consumptives Act and Regulations
- The Silicosis Act

TABLE J3

LEGISLATION UNDER THE JURISDICTION OF THE ONTARIO DEPARTMENT OF HEALTH

INDIRECT

Alcoholism Research Foundation Act
The Burial of War Veterans Act
The Cancer Remedy Act
The Chiropody Act and Regulations
The Dental Technicians Act
The Dentistry Act
The Drugless Practitioners Act and Regulations
The Embalmers and Funeral Directors Act and Regulations
The Medical Act
The Ontario Cancer Treatment and Research Foundation Act
The Optometry Act and Regulations
The Pharmacy Act and Regulations

TABLE J3-a

AMOUNTS PAID IN SALARIES TO EMPLOYEES OF THE PROVINCIAL
DEPARTMENT OF HEALTH FOR YEAR ENDING MARCH 31, 1950

Division	Total
Main Office	\$182,280.28
Statutory	8,000.00
Health Service	21,677.30
Health Units	10,679.88
Maternal and Child Hygiene	10,950.44
Public Health Nursing	28,117.21
Dental Service	16,969.92
Nurses Registration	19,804.14
Epidemiology	14,425.59
Venereal Disease	16,205.38
Tuberculosis Prevention	142,161.72
Industrial Hygiene	149,574.55
Sanitary Engineering	91,187.09
Laboratory	463,513.75
Hospitals	39,237.06
Psychiatric Services	13,358.92
Ontario Mental Hospitals	6,931,832.99
Cost of Living Bonus	772,303.55
Total	\$8,932,279.77

TABLE J4

SUMMARY OF EXPENDITURES, PROVINCIAL DEPARTMENT OF HEALTH
FOR FISCAL YEAR ENDING MARCH 31, 1949.

Division of the Department of Health	Total
Main Office	\$458,859.40
Public Health Administration	472,332.24
Public Health Nursing	32,317.25
Maternal and Child Hygiene	290,836.90
Dental Service	35,659.97
Nurses Registration	40,097.80
Epidemiology	497,384.09
Venereal Disease Control	193,565.97
Tuberculosis Prevention	4,406,304.78
Industrial Hygiene	168,144.74
Sanitary Engineering	107,799.03
Laboratories - Central Laboratory	341,167.88
Branch Laboratories	235,240.67
Subsidized Laboratories	27,468.05
Hospitals:	
Public and Private Hospitals Division	3,688,196.84
Ontario Mental Hospitals Division	
General Expenses	172,562.89
Ontario Mental Hospitals	10,858,691.34
Statutory	8,533,581.45 [▲]
Special Warrants	441,548.21
TOTAL	\$31,001,759.50
▲ This figure is made up as follows:	
Statutory	\$28,000.00
Maintenance grants to public hospitals	6,328,566.44
Building grants to public hospitals	2,177,015.01
TOTAL	\$8,533,581.45

Note: The building and maintenance grants to public hospitals, which amounted to \$8,505,581.45 in the fiscal year ending March 31, 1949, were paid out of the Hospital Aid Fund. The Department of Health itself paid \$3,450,000.00 into the fund this year which amount is included in the above table as an expenditure of the Public and Private Hospitals Division.

TABLE J5
ONTARIO DEPARTMENT OF HEALTH REVENUE FOR FISCAL YEAR ENDING MARCH 31, 1949.

ORDINARY MAIN OFFICE	Subtotal	Total		Subtotal	Total
Cancer Control - Sale of Radon Seeds	\$427.84		Industrial Hygiene - X-ray Films and Services	\$13,648.60	\$13,648.60
Miscellaneous -	<u>3,075.12</u>	\$3,502.96	Hospitals -		
BRANCHES			Patients' Maintenance	1,807,574.23	
Tuberculosis Prevention -			Licenses - Private Hospitals	340.00	
X-ray and Other Services	91,888.02	91,888.02	Perquisites	219,288.29	
Epidemiology -			Removal of Patients	1,340.94	
Sale of Products	418.75		Transport Service	11,809.91	
Biological Syringes	<u>12,851.47</u>	13,270.22	Miscellaneous	1,779.70	
Insulin			Sale of Produce and Stock	<u>214,133.14</u>	2,256,266.21
Sanitary Engineering -			REIMBURSEMENTS OF EXPENDITURES		
Sale of Products	429.50		MAIN OFFICE		
Chlorine			Grants -		
Fees--Frosted Food Locker	<u>1,988.00</u>	2,417.50	City of Ottawa--Branch Laboratory	3,000.00	
Plants			City of Sault Ste. Marie -		
Laboratory -			Branch Laboratory	<u>1,200.00</u>	4,200.00
Sale of Stock and Equipment	2,613.92		Institutions -		
Fees -			Orillia Industries -		
Analytical	<u>31,414.56</u>	61,708.23	Revenue from Industrial	11,387.22	11,387.22
Pathological	<u>27,679.75</u>		Operations		
Registrar of Nurses -			Total Reimbursements of		15,587.22
Fees -			Expenditures		
Registration	11,194.00		Gross Ordinary Revenue		2,500,066.90
Reregistration	<u>22,690.00</u>		Deduct Reimbursements of		
Examination	7,778.00		Expenditures		15,587.22
Sales			NET ORDINARY REVENUE		2,484,479.68
Miscellaneous	<u>115.94</u>	41,777.94			

CHAPTER III

LOCAL PUBLIC HEALTH ADMINISTRATION

The administration of public health services in Ontario is partly provincial and partly local. The preceding chapter has outlined the provincial administration by the Ontario Department of Health, and this chapter follows through to the local level.

Originally there was only one type of local public health administration in Ontario - a local board of health for every municipality. In 1934, an alternative type of local health administration was introduced in the form of the health unit (Statutes of Ontario, 1934, chapter 47).

As set forth in section 34 of the Public Health Act, a health unit may be established by one municipality, or two or more municipalities may unite their public health services for this purpose. Where a health unit is established it replaces the former administration which was vested in a municipal board of health.

Municipal Boards of Health.

The organization of municipal boards of health is laid down in sections 12 and 13 of the Public Health Act, R.S.O. 1950, c. 306, which read as follows:

12.(1) There shall be a local board of health for every municipality in Ontario, except where a health unit is established under this Act.

(2) In a city, and in every town having a population of 4,000 or over according to the enumeration of the assessors for the past preceding year, the local board shall consist of the mayor, the medical officer of health, and three resident ratepayers to be appointed annually by the council at its first meeting in every year, R.S.O. 1937, c. 299, s. 13 (1, 2).

(3) In a city having a population of 100,000 or over according to the enumeration of the assessors for the last preceding year, the council may by by-law provide that the local board shall consist of the mayor, the medical officer of health, and five resident ratepayers, at least two of whom shall not be members of the council, who shall be appointed annually by the council at its first meeting in every year, 1943, c. 24, s. 2.

(4) In a town having a population of less than 4,000, according to such enumeration, and in every other municipality, the local board shall consist of the head of the municipality, the medical officer of health, and one resident ratepayer to be appointed as provided by subsection 2.

(5) There shall be a secretary of the local board, and, unless otherwise provided by the council, the clerk shall be the secretary.

(6) One or more members of the council may be appointed to be members of the local board.

(7) Where a health unit is established, the local board thereof, shall be constituted and appointed as provided by the regulations, and such local board shall take the place of the local board or boards which but for the establishment of the health unit would exist in the municipality or municipalities forming the health unit, R.S.O. 1937, c. 299, s. 13 (3-6).

13. Every local board shall be a corporation by the name of "The Local Board of Health of the City (or as the case may be) of (inserting the name of the municipality) R.S.O. 1937, c. 299, s. 14.

Expenses incurred by the local board are to be paid by the treasurer of the municipality. (Sec. 20).

The duties of a local board are set out in section 25:

25. It shall be the duty of a local board to superintend and ensure the carrying out of the provisions of this Act and of the regulations or of any by-law of the municipality pertaining to public health, and to execute, do and provide all such acts, matters and things as are necessary for that purpose, R.S.O. 1937, c. 299, s. 26.

The statutory powers of a local board are contained in the various acts listed in Table J2. In addition a local board is responsible for the enforcement of any municipal by-laws relating to public health.

The appointment of medical officers of health, sanitary inspectors, food and dairy inspectors, public health nurses and physicians is laid down in section 33. The approval of the Minister of Health is required in the case of medical officers of health and sanitary inspectors. "No medical officer of health shall be removed from office except on a two-thirds vote of the whole council and with the consent and approval of the Minister" (Section 36).

The medical officer of health is the executive officer of the local board and with the board is responsible for health administration within the municipality. (Section 37).

Some municipalities employ a full-time medical officer of health and other personnel. Other municipalities employ a part-time medical officer and little or no assistance. The information respecting employment of public health personnel by municipal boards of health is contained in Table J6. Of the 23 cities and four suburban townships with greater than 30,000 population not participating in health units, there were 12 served by full-time medical officers of health, while 15 had part-time medical officers.

Survey Committee by the 23 Ontario cities outside health units and the four suburban townships with greater than 30,000 population showed that in 1948 public health services for 1,881,510 persons cost \$3,010,234.78, or \$1.60 per capita. All but \$52,199.79 of this was paid out of local tax funds. In addition to this expenditure, the cost of school health services in nine of these municipalities was paid for by the local board of education, also out of local tax funds.

TABLE J6

PERSONNEL REPORTED BY 24 HEALTH UNITS AND BY THE MUNICIPAL BOARDS OF HEALTH
IN FOUR TOWNSHIPS OVER 30,000 POPULATION AND 23 CITIES OUTSIDE HEALTH UNITS,
AS OF DECEMBER 31, 1948.

Personnel Category	Health Unit		Municipal Boards of Health Excluding Toronto		Toronto	
	Number	Ratio to Population	Number	Ratio to Population	Number	Ratio to Population
DOCTORS						
Full Time	42	1:26,289	15	1:80,100	20	1:34,000
Part Time	38		46		9	
DENTISTS						
Full Time	1	1:1,041,193	12	1:100,124	8	1:85,000
Part Time	33		39		30	
NURSES						
Full Time	180	1:5,784	181	1:6,638	220	1:3,091
Part Time	9		3			
VETERINARIANS						
Full Time	5		8		10	
Part Time	1		3			
SANITARY INSPECTORS						
Full Time	45	1:23,138	61	1:19,697	74	1:9,189
DENTAL ASSISTANTS						
Full Time			10	1:200,252	7	1:97,143
Part Time	4		3		30	
STENOGRAPHIC & CLERICAL						
Full Time	58		44		104	
Part Time	4		2			

Constitution of Health Units

The organization of a health unit is laid down in section 34 of the Public Health Act:

34. (1) A health unit comprising a county, city, town, village or township may be established by by-law of the council of such municipality.

(2) An agreement may be entered into between or among any such municipalities for the establishment of a health unit comprising both or all

of the municipalities to the agreement.

(3) Where a county, either alone or with another county or with a municipality separated from the county, is a health unit, the local municipalities in the county and not separated therefrom shall all form part of the health unit, 1944, c. 48, s. 3 (1) part.

(4) A health unit in a territorial district may comprise one or more municipalities and one or more

school sections and any area prescribed by order of the Lieutenant-Governor in Council 1944, c. 48, s. 3 (1) part; 1945, c. 17, s. 3.

(5) Where a medical officer of health is appointed for a health unit, the provision of this Act with respect to the appointment of municipal officers of health for the territory included in the health unit shall not apply and the powers and duties of a medical officer of health in any such municipality shall thenceforth be exercised and performed by the medical officer of health for the health unit, R.S.O. 1937, c. 299, s. 35(3).

(6) The Minister, with the approval of the Lieutenant-Governor in Council, may make regulations which may be general or particular in their application,

(a) respecting the establishment of a health unit;

(b) providing for the constitution of a board of health in any health unit fixing the number of members and defining the powers of the board;

(c) prescribing the powers, qualifications, salary and duties of a medical officer of health, school medical officers, dental officers, nurses, sanitary inspectors and other technical health workers in a health unit;

(d) respecting the appointment and the tenure of office of the medical officer of health, school medical officers, dental officers, nurses, sanitary inspectors and other technical health workers in a health unit;

(e) apportioning any expense incurred in carrying out this section and the regulations among the municipalities and school sections concerned, R.S.O. 1937, c. 299, s. 35(4); 1944, c. 48, s. 3 (2, 3).

(7) The expenses incurred in carrying out the provisions of this Act and the regulations made thereunder with respect to a health unit shall be borne and paid in such proportion as may be agreed upon, or in default of agreement, in such proportion as may be fixed by the Minister, or in such manner as may be prescribed by the regulations.

(8) Subject to the regulations, where a health unit is established under this Act the Minister may grant such assistance for the establishment and maintenance of the health unit as he may deem proper and any such grant shall be payable out of any moneys appropriated by the Legislature for that purpose, R.S.O. 1937, c. 299, s. 35 (5, 6).

The constitution of the board of health in each health unit is fixed in the regulations.

In considering measures for the improvement of the working facilities for health units, it should be noted that a health unit has no power to

purchase real estate. A health unit must therefore be located in rented premises unless the municipality or municipalities by which a health unit is established purchases property for the use of the unit. It is, of course, within the power of a municipality to purchase real property for the use of a health unit. Likewise, any organization having the necessary funds could purchase suitable premises and convey it to the board of health of the health unit as a gift.

The first health unit in the province was established in 1934, when four eastern counties - Stormont, Glengarry, Prescott, and Russell - were organized on this basis. The unit served as an experimental area for six years, during which time it received financial assistance from the provincial government and the Rockefeller Foundation. This area was reorganized in 1940. Formation of additional units was interrupted by the war, but was resumed in 1944.

In 1948, there were 24 health units in the province directed by full-time medical officers of health. In 1951 there were 26 (Table J7).

Unorganized Territory

The preceding information respecting local health administration by municipal boards of health and health units applies only to the part of Ontario which is organized into counties. Administration in territory without county organization is dealt with in section 133 to 142 of the Public Health Act.

In unorganized territory every magistrate is ex officio a medical officer of health and every constable is ex officio a sanitary inspector. In addition the provincial Department of Health is responsible for the health administration in these areas and the Lieutenant-Governor in Council may appoint medical officers of health, and the Minister of Health, with the approval of the Lieutenant-Governor in Council, may appoint sanitary inspectors.

Effect of Provincial Grants in 1948

The 24 health units which were active in Ontario at December 31, 1948, spent a total of \$1,057,308.86 on public health during 1948. This was made up of \$616,564.26 paid by the 347 municipalities formed into health units, and \$440,744.60 in grants to health units by the provincial government. This means that on an average the health unit spent \$1.11 per capita (based on assessed population) in 1948, of which the local municipalities paid approximately 65 cents, while the province paid 46 cents. In other words, the provincial government's assistance to health units in 1948 came to approximately 70 per cent of the money that the participating municipalities themselves paid.

Four suburban townships over 30,000 population and 23 cities which were not part of a health unit organization at December 31, 1948, re-

TABLE J7
HEALTH UNITS IN ONTARIO IN 1951, DATE OF FORMATION,
AND LOCATION OF HEADQUARTERS

Organized	Name of Unit	Headquarters Location
1940 1944	Dundas, Stormont and Glengarry Porcupine District	Cornwall [▲] Timmins
1945	Kirkland-Larder Lake District Welland and District Northumberland and Durham County Elgin-St. Thomas St. Catharines-Lincoln Oxford County	Kirkland Lake Welland [▲] Cobourg St. Thomas [▲] St. Catharines [▲] Woodstock [▲]
1946	Prescott and Russell County Brant County Prince Edward County Bruce County Peel County Dufferin County Lambton District	Hawkesbury Brantford [▲] Picton Walkerton Brampton Shelburne Sarnia [▲]
1947	Halton County Kent County East York-Leaside Lennox and Addington County Leeds and Grenville	Milton Chatham Toronto Napane Brockville
1948	Wellington County Carleton (discontinued in December, 1949, when the City of Ottawa annexed a large part of its suburban population served by this unit) Simcoe County Kenora-Keewatin Area	Fergus Ottawa Barrie Kenora
1949	Huron County	Clinton
1950	York County	Newmarket
1951	Muskoka	Bracebridge

▲ Cities included in health units.

ported to the Survey Committee that they spent a total of \$3,010,234.78 on the conservation of health, or an average of \$1.60 per capita. Of this total expenditure, which includes some expenditure by local boards of education on school health service, a total of \$2,854,348.79 was reported by these same municipalities to the Department of Municipal Affairs as representing the amount paid out of municipal funds for the conservation of health. This amounted to approximately \$1.52 per capita on the basis of the assessed population. Inasmuch as these municipalities did not form a part of a health unit, they did not receive the provincial grant described above for health units.

In other words, taxpayers in the 23 cities and four suburban townships considered above paid an average of \$1.52 per capita for their own public health services, and in addition contributed to the

46 cents per capita paid by the province for public health services in those municipalities which had been organized into health units. (See Table J8).

Of the 29 cities in the province in 1948, six were participating in health units (Brantford, Cornwall, St. Catharines, St. Thomas, Sarnia and Welland). The remaining 23 administered their public health services through local boards of health. The six, by virtue of belonging to a health unit, benefited from provincial grants to the extent of \$47,675.54 (fiscal year ending March 31, 1949); whereas the 23 cities not participating in health units received no such assistance.

Table J9 gives a comparison of the expenditures of municipal funds reported to the Department of Municipal Affairs as having been made on the conservation of health in the year ending December 31, 1948.

TABLE J8

FINANCIAL STATEMENT OF HEALTH UNITS OF ONTARIO, 1948, AS PER
AUDITED STATEMENTS SUBMITTED TO THE ONTARIO DEPARTMENT OF HEALTH

Health Unit	Assessed Population	Income	Expenditures	Cost per Person
Bruce	40,331	\$51,680.51	\$55,391.65	\$1.37
Elgin-St. Thomas	49,271	78,867.02	73,178.79	1.49
Kent	51,367	46,833.12	41,745.91	.81
Lambton	37,885	40,060.20	38,453.78	1.02
Oxford	39,119	43,988.71	42,629.82	1.09
Brant	61,288	67,141.58	67,882.69	1.11
Halton	34,677	41,314.29	38,479.88	1.11
Lincoln-St. Catharines	74,607	77,415.93	76,230.49	1.02
Welland and District	41,556	44,616.79	46,344.71	1.12
Dufferin	13,912	19,104.96	18,255.61	1.31
East York-Leaside	67,138	69,416.84	66,025.75	.98
Northumberland & Durham	55,860	76,662.50	70,927.80	1.27
Peel	37,878	34,808.58	36,082.88	.95
Leeds and Grenville	48,132	56,372.52	49,347.15	1.03
Lennox and Addington	16,475	24,000.00	22,621.35	1.37
Prince Edward	16,004	22,000.00	24,264.79	1.52
Prescott & Russell	41,030	45,237.76	42,799.35	1.04
Stormont, Dundas & Glengarry	77,009	66,634.04	65,259.81	.85
Kirkland-Larder Lake	26,817	41,479.30	40,048.40	1.49
Porcupine	40,346	64,236.83 ^{xx}	53,295.58	1.32
Kenora-Keewatin ^x	12,785	12,577.66 ^x	12,578.10 ^x	.98 ^x
Carleton ^x	33,573	23,370.60 ^x	17,303.38 ^x	.52 ^x
Simcoe ^x	88,627	50,287.47 ^x	43,497.50 ^x	.49 ^x
Wellington ^x	35,506	20,070.00 ^x	14,663.69 ^x	.41 ^x
Total	1,041,193	\$1,118,177.21	\$1,057,308.86	\$1.11 (average)

x Six months only; omitted from average

xx \$7,774.27 added to reserves and not included in expenditures.

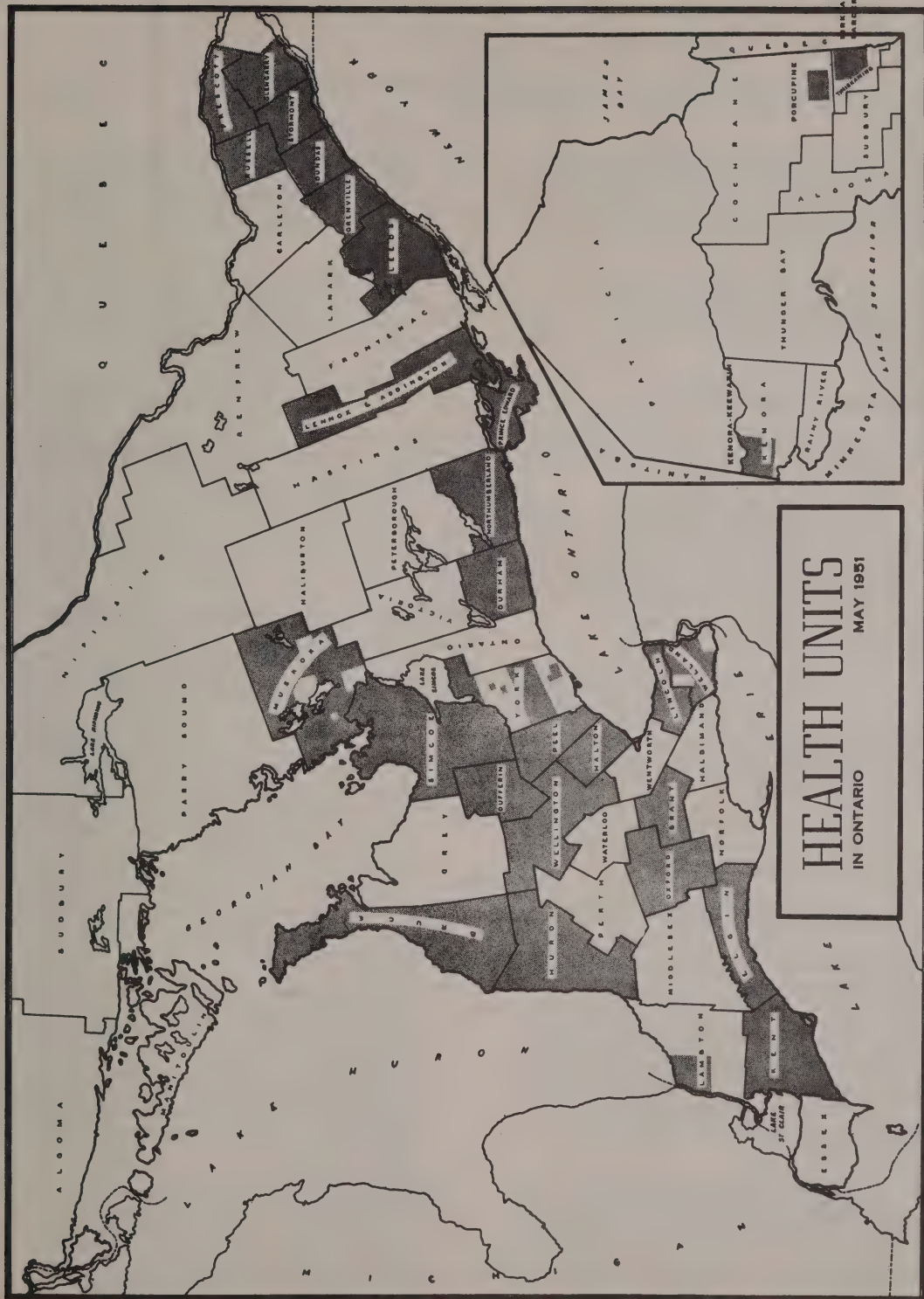
TABLE J9

EXPENDITURES OF MUNICIPAL FUNDS ON THE CONSERVATION OF HEALTH IN THE YEAR ENDING
DEC. 31, 1948, AS REPORTED TO THE DEPARTMENT OF MUNICIPAL AFFAIRS OF ONTARIO

MUNICIPALITIES	HEALTH EXPENDITURES	ASSESSED POPULATION	EXPENDITURE PER CAPITA
29 Cities	\$2,817,776.00	1,827,840	\$1.54 [▲]
7 Separated Towns	24,142.00	47,433	.51
139 Towns	222,755.00	507,804	.44
155 Villages	34,518.00	172,904	.20
572 Townships	421,658.00	1,375,042	.31
14 Improvement Districts	6,535.00	10,504	.62
Total	\$3,527,384.00 ^{▲▲}	3,941,527	\$.89 (average)

▲ If the city of Toronto were omitted the per capita expenditure by the remaining 28 cities would average \$1.03; and the provincial average without Toronto would be 58 cents. Per capita expenditure of municipal funds on the conservation of health in Toronto was reported at \$2.39 in 1948.

▲▲ In some cases these returns to the Department of Municipal Affairs may not include expenditures on school health service paid for by the boards of education in 14 municipalities.



See Table J7 For Details

CHAPTER IV

PROVINCIAL ASSISTANCE TO MUNICIPAL PUBLIC HEALTH PROGRAMS

As is detailed in Chapter III of this section, there are two types of municipal public health administration--the local board of health of individual municipalities, and the health unit comprising one or more municipalities.

The government of Ontario pays a percentage of the expenditure of a health unit but no such grant is paid to municipal boards of health outside health units although both types of organization are ostensibly serving the same purpose.

Basis of Grants to Health Units

Subsection (8) of section 34 of the Public Health Act, R. S. O. 1950, c. 306 provides as follows:

"Subject to the regulations, where a health unit is established under this Act the Minister may grant such assistance for the establishment and maintenance of the health unit as he may deem proper and any such grant shall be payable out of any moneys appropriated by the Legislature for that purpose, R. S. O. 1937, c. 299, s. 35 (5, 6)".

Although there were no regulations in effect with reference to such grants at the time of this survey, there was an informal memorandum from the Ontario Department of Health which stated that the cost of health unit expenditures to be borne by the provincial government was as follows:-

"for counties - 50 per cent
for cities - 25 per cent to 33 1/3 per cent
or at the discretion of the Minister".

It was apparently the practice of the Department of Health to calculate this percentage on the basis of estimated total health unit expenditures. In other words, it represented a percentage not only of the municipality's contribution to health unit expenditure, but also of the grant monies contributed by the province. This grant was paid at the end of each quarter, not on the basis of actual expenditure, but rather as a percentage of the projected expenditure made in estimates at the beginning of the year. Adjustments of any differences between estimated and actual expenditures were not made before the end of the budget year.

- 1 - Cities forming part of health units and having a population greater than 25,000 benefited by an amount from the province equal to one third of the city's share of the health unit's expenditure.

- 2 - Cities forming part of health units and having a population less than 25,000 benefited by an amount from the province equal to one half of the city's share of the health unit's expenditure.
- 3 - Other municipalities which form part of a health unit benefited by an amount from the province equal to the municipality's share of the health unit's expenditure.

This was the general formula in effect, although there were no statutes or regulations regulating that it be followed. At the discretion of the Minister of Health other arrangements could be entered into between the province and any particular health unit. For example, one city, which was a part of an early health unit, was at the time of this survey benefiting by an amount equal approximately to the amount paid by the city to the health unit.

Criticism of Present Public Health Grants System

There are two major criticisms of the present system of making provincial grants to municipalities for public health purposes:

- 1 - Absence of any regulations clearly setting forth the basis upon which such grants will be made to municipalities of varying population and financial ability makes it possible for inequities in the distribution of grants to occur as between municipalities of similar circumstances participating in health units. For example, one city has been benefiting by an amount equal to one half of its health expenditures, as against one third in three other cities, and one quarter in the case of the remaining two.
- 2 - The policy of restricting public health grants to those 347 municipalities that are members of health units places a premium upon such membership and burdens the residents of the remaining municipalities with the full cost of their own services (which may be the same as those given by health units), plus a portion of the cost of maintaining health units in other parts of the province.

Preferential treatment of certain municipalities might be deemed defensible if all 347 of them were in circumstances which prevented their supporting a minimum public health service independently of outside aid;

but six of the municipalities benefiting by grants are cities and many others are sound and prosperous towns, villages and townships.

time be made a condition of the grants' being continued - except in possible special cases where such a requirement might work a hardship on the people of a particular municipality.

Factors to be Considered in Revising Public Health Grants

- 1 - It would seem reasonable that all municipalities with an acceptable public health service should have an equal right to provincial government financial aid for their public health program, regardless of whether or not they form a part of health unit.
- 2 - Grants from the Ontario Department of Health in aid of local public health programs can reasonably be expected to apply only to services conducted by local boards of health, and not to any which may be operated under other department auspices, such as school health services operated by local boards of education.
- 3 - It might well be made a condition of the grants that they may be spent only upon such public health services as could be set forth clearly in the regulations.
- 4 - Desirable as it may be to require local public health programs to include a prescribed number of basic services it might not be advisable to make this a condition of the grants at their inception. While such a policy would result in the province's helping to defray the cost of meagre services in some municipalities at the outset, it would be an incentive toward progressive improvement.

After a period of development and experience, say three years, the state of local public health services should be reviewed in detail, and a standard of service might at that

One Possible Way to Revise Public Health Grants

In the light of the foregoing criticisms and qualifying factors, one possible basis of revision is as follows:

Public Health grants to all cities having a population of 25,000 or greater on the basis of one third of the expenditure of their own money for public health purposes, approved by the Minister of Health; and to all other municipalities in the province, grants matching dollar for dollar the amount of local money spent.

These amounts are identical with those now generally applicable in municipalities forming part of health units, with the exception that the existing distinction between cities of less than 25,000 population and other municipalities would be abolished.

Proceeding from the estimates by municipalities of their expenditures on the conservation of health in the year ending December 31, 1948, (see Table J9), the cost of the above revision would work out approximately as indicated in Table J10.

The additional cost to the province of implementing the above proposal would be approximately \$2,072,525, less \$440,744.60 now being paid by the province to health units. This can be estimated at \$1,631,781.

The Province of Ontario is now eligible for an annual federal public health grant amounting to \$1,466,150. It is possible that this federal grant could be made applicable to the public health grants to municipalities suggested below.

TABLE J10

ESTIMATED COST OF INCLUDING ALL ONTARIO MUNICIPALITIES IN PUBLIC HEALTH GRANTS

Municipalities	Health Expenditures As Reported in Table J9	Provincial Grant on Basis Suggested ^A	Total Expenditure Thus Made Possible
29 Cities	\$2,817,776	\$1,362,917	\$4,180,693
7 Separated Towns	24,142	24,142	48,284
139 Towns	222,755	222,755	455,510
155 Villages	34,518	34,518	69,036
572 Townships	421,658	421,658	843,316
14 Improvement Districts	6,535	6,535	13,070
Total	\$3,527,384	\$2,072,525	\$5,599,909

^A To all cities with a population of 25,000 or greater--one third of their public health expenditure; to all other municipalities in the province--matching grants, dollar for dollar of local money spent on public health.

CHAPTER V

LOCAL PUBLIC HEALTH SERVICES

The basic public health services of local boards of health and health units are required by statute. The Public Health Act, other provincial acts and regulations and municipal by-laws pertaining to health, outline the official duties and responsibilities of the municipalities, local boards of health and medical officers of health.

Statutory services comprise:

- (1) Communicable disease control with particular emphasis on reporting, isolation, quarantine, placarding and disinfecting.
- (2) Sanitary supervision and control - including food, water, and environmental sanitation.
- (3) Compilation of an annual report to the Ontario Department of Health.

Nonstatutory services are:

- (a) Those provided by agreement with other municipal departments, such as local board of education for the medical and dental inspection of school children, the dental treatment of school children, for which authority is given under the Public Health Act.
- (b) Those provided with or without agreement with other parties, which are designed to protect the health of the public and to prevent disease.

The horizon of public health practice has widened to include screening, diagnostic, treatment and preventive measures for diseases other than those which are communicable, for example, cancer and heart disease. These programs at present are not the responsibility of governmental agencies but represent a combined approach on problems which can be attacked only by cooperative effort on the part of local and provincial governments and voluntary groups.

Direct Services of Local Official Health Agencies

The direct services which may be provided by a local board of health or by a health unit are:

- (1) Sanitation. The examination and safeguarding of water, milk and food supplies, and the protection against other environmental hazards to health.
- (2) Communicable Disease Control. Every local

board of health has a responsibility for preventing the spread of communicable diseases. In the case of tuberculosis, each board may provide its own screening and diagnostic x-ray facilities, either through a stationary or travelling clinic. The basic program may include the examination of suspect cases, the follow-up of known cases, the examination of contacts, screening procedures with tuberculin testing or patch tests in schools, etc., x-ray screening procedures among apparently healthy members of the population, and B.C.G. vaccination.

Apart from the statutory clauses of the Venereal Disease Prevention Act, the local board of health may promote preventive measures with respect to the suppression of facilitation, cooperate with law enforcement in the suppression of prostitution, and assist in educational efforts among social, religious, educational and family groups.

An immunization service is available to all members of the community. The participation of practising physicians in this program is encouraged.

- (3) Maternal Hygiene. The objective of this program is to assure that all pregnant women receive adequate prenatal care. Where this is not available through the family physician because of inability to pay, the local board of health may, with the active support and assistance of the medical profession, arrange for the required supervision.
- (4) Infant and Preschool Health. This may be a cooperative effort on the part of the local board of health and the medical profession and where necessary, the board may provide supervisory and preventive services for infants and young children.
- (5) School Health. The health supervision of school children with emphasis on screening and medical examination at school entrance and the correction of defects within the limitations of the community's treatment facilities.
- (6) Public Health Nursing. In addition to school and clinic duties, the main responsibility of the nurse is to impart health information in the home through prenatal instruction and counselling.

- (7) Vital Statistics. This includes the use of information relating to births, deaths by age and cause, and the incidence of communicable disease.
- (8) Public Health Education. The dissemination of health information, channelled through press, pamphlet, radio, public meeting and visual education, for the improvement of personal and community health practices.
- (9) Dental Hygiene. The promotion of good dental health, particularly in preschool and school age children and the provision of treatment if the patient is unable to pay.
- (10) Mental Health. Examination and treatment of emotional disturbances, especially in the young, and the prevention of mental ill health.
- (11) Nutrition. This is part of the service of every board of health worker. Where population groups are large enough, the local board may acquire the services of a qualified nutritionist for education of other health workers and the community at large.
- (12) Laboratory. A laboratory service is available to all practising physicians and boards

of health through the network of laboratories maintained, either completely or partially, by the Ontario Department of Health.

Consultative Services

These services may be supplied to:

- (1) Various departments of municipal governments--municipal clerks, engineering or board of works, building and plumbing, parks boards, zoning and community planning, recreation, fire and police.
- (2) Service clubs, welfare groups, and other such voluntary groups, with respect to programs which affect the community, such as handicapped children, care of the aged and infirm, and accident prevention.
- (3) Professional groups. It is obvious that no local board of health can operate satisfactorily without the active cooperation and assistance of professional groups in the community, including such groups as medical, nursing, dental, veterinary, engineering and educational.

CHAPTER VI

TRAINING OF PUBLIC HEALTH PERSONNEL

School of Hygiene, University of Toronto

The School of Hygiene in the University of Toronto was established in 1925 for the training of professional personnel to serve in public health. In order to retain a direct relationship between the Faculty of Medicine and the Department of Hygiene and Preventive Medicine, the School has been made responsible for:

- (a) All undergraduate instruction in hygiene and preventive medicine to students of the Faculty of Medicine, the School of Nursing, the Faculty of Arts, the School of Physical and Health Education, and the School of Pharmacy.
- (b) Postgraduate instruction in public health for physicians, dentists, veterinaries, engineers and graduates of Arts and Science Faculties, and university graduates desiring training in hospital administration.
- (c) Postgraduate instruction in the subjects of bacteriology, immunology, parasitology, virus infections, biostatistics, public health nutrition, physiological hygiene, chemistry of sanitation, and industrial hygiene for students proceeding to an M.A. or Ph.D. degree.

A close collaboration exists between the School and the Connaught Medical Research Laboratories. Their respective staffs serve in a triple capacity, i. e., through teaching, medical research, and the production of essential biological products required by health departments throughout Canada.

Undergraduate training in public health and allied subjects is given annually to approximately 1,100 students, and 60-70 university graduates are registered annually in postgraduate courses.

The number of physicians who have taken postgraduate training at the School of Hygiene since its founding is shown in Table J11.

The school is believed to be able to train adequately as many as 90 postgraduates yearly.

Teaching staff at the time of this survey included 12 professors and 16 associate and assistant professors.

As a result of its survey of public health education in Canada, the Rockefeller Foundation contributed \$1,250,000 toward the founding of the School of Hygiene, and has subsequently made additional short

-term grants in excess of \$100,000. The University of Toronto, in its general budget for salaries and supplies, has increased its support for the graduate and undergraduate teaching of public health from approximately \$18,000 in 1924 to approximately \$71,000 in 1949, and provided for the maintenance and servicing of the school building. The Province of Ontario, in addition to meeting the needs of the University as a whole (which includes the amount contributed by the University), has made special grants totalling \$50,000 during the past ten years in support of a field training centre conducted by the School of Hygiene in East York Township, adjoining Toronto, and provided an additional \$10,000 for research in industrial hygiene.

The following statement shows the financial position of the School of Hygiene, including the maintenance of research work, which is essential to the teaching, and presents the total expenditures by each department and subdepartment for the session 1949-50:

<u>Department of School</u>	<u>Expenditures</u>
Epidemiology and Biometrics	\$20,691
Public Health Administration	27,244
Physiological Hygiene.....	56,478
Public Health Nutrition	34,070
Chemistry in Relation to Hygiene.....	12,870
Hospital Administration.....	18,200
Hygiene and Preventive Medicine	44,084
<u>Subdepartments</u>	
Virus Infections	3,770
Parasitology	4,735
Administration of School	13,128
	<u>\$235,270</u>

This budget is provided as follows:	<u>Revenue</u>
University of Toronto General Funds	\$71,004
Rockefeller Endowment Fund (Interest on \$850,000).....	34,500
Special Rockefeller Foundation Grants	23,445
W.K. Kellogg Foundation	18,200
Connaught Medical Research Laboratories	30,000
University of Toronto Research Fund	1,551
Ontario Cancer Treatment and Research Foundation	3,920

TABLE J11
D. P. H. GRADUATES OF THE SCHOOL OF HYGIENE, UNIVERSITY OF TORONTO

Year of Grad.	Total Number	Residents of Ontario on Enrolment	Residents of Ontario at Present	Number in Ontario by Age Groups						Number of Years of Public Health Service Since Obtaining the D.P.H.												
				Under 30 yrs.	30-39	40-49	50-59	60-69	70+	0	1	2	3	4	5	6-10	11-15	16-20	21-25	26-30	31+	
1911-20	16	9	4	-	-	-	-	3	1 ^x	-	-	-	-	-	-	-	1	1	1	2	4	
1921-30	59	37	30	-	-	2	11	11	6 ^x	2	-	-	-	-	-	1	-	6	18	9	-	
1931-40	142	31	23	-	2	12	6	3	-	-	-	-	-	-	-	-	15	8	-	-	-	
1941	25	4	4	-	2	1	-	1	-	1	-	-	-	-	-	5	-	-	-	-	-	
1942	22	7	7	-	-	4	1	2	-	-	-	-	-	-	-	7	-	-	-	-	-	
1943	15	4	5	-	3	-	1	1	-	-	-	-	-	-	-	5	-	-	-	-	-	
1944	18	6	5	-	1	3	1	-	-	-	-	1	-	-	-	4	-	-	-	-	-	
1945	22	12	10	-	4	3	3	-	-	-	-	-	-	1	-	9	-	-	-	-	-	
1946	63	34	35	-	15	15	4	1	-	2	-	-	2	1	30	-	-	-	-	-	-	
1947	25	9	7	1	6	-	-	-	-	2	-	1	1	2	-	-	-	-	-	-	-	
1948	15	9	8	1	3	4	-	-	-	-	-	1	7	-	-	-	-	-	-	-	-	
1949	21	10	13	2	6	5	-	-	-	-	-	13	-	-	-	-	-	-	-	-	-	
1950	26	12	9	3	4	1	1	-	-	-	12	-	-	-	-	-	-	-	-	-	-	
TOTAL	469	184	160	7	46	50	28	22	7 ^x	7	12	16	10	4	30	31	16	15	19	11	4	

^xRetired

This table does not show that the following graduates died while serving in Ontario: 1911-20 - 5; 1921-30 - 4; 1931-40 - 1. Moreover in the age group 60-69 for the years 1921-30, where 11 are shown this includes two that are now retired and in the 1931-40 period where three are shown (age 60-69), one of these has now retired.

National Research Council	
Grants	24,400
Abrasive Grains Company	5,000
Public Health Research	
Grants	9,100
Robert Gould Research	
Foundation	4,000
National Foundation for Infantile	
Paralysis Inc	5,150
Province of Ontario	5,000
	<u>\$235,270</u>

The establishment of schools of hygiene is a comparatively recent development. In 1947 there was introduced a system of accreditation similar to that which has applied to medical schools for many years. At present, including the University of Toronto, there are ten accredited schools on the North American continent.

The future financing of the School of Hygiene has become a serious problem. In addition to a \$27,000 reduction in funds occasioned by the termination of grants, reduced income from endowments, and curtailment in the general budget of the University, there is the necessity of assuming the cost of training hospital administrators under an agreement with the W.K. Kellogg Foundation, the latter having undertaken to finance this project only for the initial period of three years.

The Training of Public Health Nurses

Five Ontario universities have courses which prepare public health nurses, viz., Toronto, McMaster, Queen's, Western and Ottawa. Details of these courses and their enrolment are given in Chapter II, Section F, Volume II of the Report of the Ontario Health Survey Committee.

Originally, a one-year certificate course was instituted whereby the graduate of the hospital school was prepared for public health nursing. As the demand grew for a more fully prepared worker, the universities established degree courses open to graduates of Ontario secondary schools.

Sanitary Inspectors

Since 1935 the Canadian Public Health Association has conducted annual examinations for the Certificate in Sanitary Inspection (Canada). Seven hundred and thirty-five candidates have obtained the certificate (1935-1948), an annual average of about 65. Of this number, 249 candidates, or about one third were from Ontario. The certificate is now recognized as a qualification for employment in this field in Canada.

At present the educational requirement for registration for the examinations is junior matriculation or its equivalent.

The examinations are held every September in the capital city of each province. One day is devoted to a series of inspections and the preparation of a written report. Three written papers on Environmental Sanitation; Food Sanitation and Public Health Administration; Communicable Diseases and Vital Statistics, each occupy half a day. In addition, there is an oral examination lasting half an hour. The fee for the examination is \$15.00.

Originally candidates were responsible for their own preparation. To assist them, the Committee on the Certification of Sanitary Inspectors issued, in 1937, a "Manual for Sanitary Inspectors", prepared by members of health departments and universities. In November 1942, the committee introduced a correspondence course, which has been given annually.

The correspondence course covers a period of 24 weeks, commencing in the autumn. It consists of reading assignments in the Manual for Sanitary Inspectors, with supplementary material, and a series of weekly exercises which are sent to the Canadian Public Health Association for marking. The fee for the course is \$50.00.

Candidates who have not been employed as sanitary inspectors for one year are required to obtain at least 100 hours of local field experience with a municipal board of health.

The inadequacy of the present training facilities--a 24-week correspondence course supplemented by one or two weeks of field work--has long been recognized. One alternative suggestion which has been advanced is a course occupying about nine months, in which lectures and field work with a board of health would be combined.

Since 1948, the professional training grants permit sanitary inspectors named by provincial departments of health to receive a course of training up to 12 months. A stipend of \$125.00 per month for single men, and \$175.00 per month for married men is provided.

Apart from purely routine duties, inspection, issuing of notices, placarding, etc., the sanitary inspector is required to have certain technical knowledge. It is generally acknowledged that the present correspondence courses of instruction fail to provide an adequate background for these duties.

TABLE J12

NUMBER OF HOUSEHOLDS IN ONTARIO BY REGIONS AS AT DECEMBER, 1948

	Estimated Population	Households		
		Urban	Rural	Total
Region 1				
Bruce	42,623	6,550	5,879	12,429
Elgin	51,070	8,099	7,509	15,608
Essex	200,709	39,711	14,267	53,978
Huron	43,900	4,810	8,614	13,424
Kent	74,007	11,227	10,802	22,029
Lambton	67,793	10,755	9,797	20,552
Middlesex	147,236	29,183	13,665	42,848
Oxford	55,133	7,840	7,931	15,771
Perth	50,515	8,146	6,512	14,658
	732,986	126,321	84,976	211,297
Region 2				
Brant	66,043	11,702	7,355	19,057
Haldimand	21,846	2,473	3,922	6,395
Halton	35,935	5,480	5,320	10,800
Lincoln	78,782	14,247	8,122	22,369
Norfolk	39,384	4,185	7,229	11,414
Welland	115,579	18,369	13,193	31,562
Wentworth	241,624	55,665	12,402	68,067
	599,193	112,121	57,543	169,664
Region 3				
Dufferin	14,196	1,513	2,779	4,292
Durham	27,104	3,787	4,551	8,338
Grey	59,510	8,713	8,709	17,422
Haliburton	7,852	-	2,187	2,187
Muskoka	23,898	2,818	3,847	6,665
Nipissing	47,612	6,089	5,176	11,265
Northumberland	34,489	4,450	5,491	9,941
Ontario	71,370	10,896	9,332	20,228
Parry Sound	29,655	2,573	4,991	7,564
Peel	42,417	3,545	8,592	12,137
Peterborough	56,706	10,531	4,847	15,378
Simcoe	97,202	14,683	12,542	27,225
Victoria	25,724	3,789	3,866	7,655
Waterloo	113,681	23,990	8,522	32,512
Wellington	62,958	10,793	7,014	17,807
York	1,067,630	228,151	84,722	312,873
	1,782,004	336,321	177,168	513,489
Region 4				
Frontenac	60,201	9,137	5,551	14,688
Grenville	16,796	2,306	2,565	4,871
Hastings	69,600	10,251	8,875	19,126
Leeds	36,384	5,192	4,759	9,951
Lennox and Addington	17,986	1,314	3,926	5,240
Prince Edward	18,097	1,892	3,723	5,615
	219,064	30,092	29,399	59,491

TABLE J12 (CONT'D)

NUMBER OF HOUSEHOLDS IN ONTARIO BY REGIONS AS AT DECEMBER, 1948

	Estimated Population	Households		
		Urban	Rural	Total
Region 5				
Carleton	226,644	42,826	12,500	55,326
Dundas	16,359	1,364	3,477	4,841
Glengarry	18,391	966	3,974	4,940
Lanark	34,174	5,765	3,669	9,434
Prescott	25,011	2,096	3,345	5,441
Renfrew	57,654	7,042	7,176	14,218
Russell	18,116	757	3,068	3,825
Stormont	47,738	4,229	6,338	10,567
	444,087	65,045	43,547	108,592
Region 6				
Algoma	59,158	10,925	7,878	18,803
Cochrane	87,858	9,761	11,638	21,399
Manitoulin	12,241	627	2,379	3,006
Sudbury	100,944	14,296	13,051	27,347
Timiskaming	53,513	9,060	6,215	15,275
	313,714	44,669	41,161	85,830
Region 7				
Kenora)	35,221	3,707	6,327	10,034
Patricia Portion)				
Rainy River	21,576	1,980	3,219	5,199
Thunder Bay	107,781	17,061	9,643	26,704
	164,578	22,748	19,189	41,937
Grand Total	4,255,626	737,317	452,983	1,190,300

According to the second annual economic survey of the Ontario Bureau of Statistics and Research, Department of the Treasury, for 1948, there were 1,190,300 households* in the Province of Ontario.

*In the census a household is defined as "a person or group of persons living in one housekeeping community. The persons may or may not be related by ties of kinship but if they live together or with common house-keeping arrangements they constitute a household".

TABLE J13

MOTOR VEHICLE ACCIDENT STATISTICS, PROVINCE OF ONTARIO, DURING 1950

AGE GROUP	NATURE OF INJURIES													
	Fractured Skull		Fractured Spine		Other Fractures		Concussion of Brain		Severe General Shock with Bruises and Cuts		Slight Shock and Shake-up		Internal Injuries	
	Fatal	Nonfatal	Fatal	Nonfatal	Fatal	Nonfatal	Fatal	Nonfatal	Fatal	Nonfatal	Fatal	Nonfatal	Fatal	Nonfatal
0-4	29	43	4	126	1	32	1	716	33	8	13	32	13	8
5-14	56	80	7	321	6	104	4	1,669	58	32	22	58	22	32
15-35	130	109	21	1,247	8	247	2	6,427	121	117	82	121	82	117
36-54	68	55	19	684	8	80	2	2,544	82	66	68	82	68	66
55-64	30	13	5	298	8	25	4	763	24	16	22	24	22	16
65 and over	52	16	5	271	27	15	7	580	28	12	33	28	33	12
Age not Stated		10	4	92		15		553	41	11				
Total	365	326	61	3,039	50	518	18	13,252	-	262	240	387	240	262

AGE GROUP	NATURE OF INJURIES											
	Other Injuries, Sprains, Dislocations, Wrenches, etc.		Cuts by Glass (only)		Drowned		Burned		Asphyxiated		Total	
	Fatal	Nonfatal	Fatal	Nonfatal	Fatal	Nonfatal	Fatal	Nonfatal	Fatal	Nonfatal	Fatal	Nonfatal
0-4		5		26	1				2		47	989
5-14		47		34	1				1		92	2,347
15-35		578	2	577	6	6	11	11	1		265	9,483
36-54		291	1	212	6	2	4	4	2		179	4,043
55-64		71		44					1		73	1,259
65 and over		41	1	24			1				135	988
Age not Stated		54		50								831
Total		1,087	4	967	14	8	16	6			791	19,940

CHAPTER VII

MEDICAL SERVICES IN INDUSTRY

The Survey Committee recognizes the importance of medical and nursing services in industries of various kinds in all parts of the province. Because the nature of this work is closely allied to certain aspects of public health practice, attention is drawn here to other sections of this report where information pertinent to this subject is given in some detail.

In Section F on the Provision of Nursing Care, Volume II, it can be seen in the chapter on personnel inventory that of 9,260 registered nurses employed full time in their profession in 1949, there were 396 who reported industrial nursing as their field of activity.

Residence of these 396 is given by counties and districts in Table F3, and estimated ages of the same group are shown in Table F6.

Section E on Medical Manpower in Ontario, also in Volume II, shows that of 4,595 physicians in active civilian practice in Ontario at Dec. 31, 1948, there were 63 who reported industrial medicine as their major type of work (i.e., occupying 50 per cent or more of their time). Of the 63, there were 59

who said they were engaged in general practice in the industrial field, and the remaining four reported that they did examinations and consultation work for industry.

Ages of the 63 industrial physicians in the above group are given in Table E12; and Table E14 shows, by regions, the distribution of the 59 industrial physicians who reported that their major source of income was derived from industry.

Table E25 shows that out of the 63 physicians devoting the major portion of their time to industrial medicine there were 35 who reported having special training in this field. In addition, (Table E26), there were 12 others who stated that they had special training in industrial medicine, although not devoting the major portion of their time to it.

The table which follows (J14), shows a further analysis of material assembled by the Survey Committee in its medical manpower work. In addition to the 63 mentioned above, this shows the approximate numbers of physicians spending 50 per cent or less of their time on industrial work. For this reason it covers 474 physicians--93 specialists and 381 general practitioners.

TABLE J14

ONTARIO PHYSICIANS PRACTISING INDUSTRIAL MEDICINE AT DEC. 31, 1948, BY TYPE OF WORK

% of Time Spent in Industrial Medicine [★]	Accidents	Surgery	Examinations	W.C.B.	General	Not Stated	TOTAL
91 to 100	0	0	0	2	42	0	44
81 to 90	0	0	0	0	3	0	3
71 to 80	0	0	0	0	9	0	9
61 to 70	0	0	0	0	2	0	2
51 to 60	0	1	1	0	3	0	5
41 to 50	1	0	1	1	16	0	19
31 to 40	1	0	2	1	16	0	20
21 to 30	7	4	8	2	10	0	31
11 to 20	8	2	1	3	25	1	40
10 and less	29	27	55	28	135	5	279
Not Stated	2	2	2	1	8	7	22
TOTAL	48	36	70	38	269	13	474

[★] Physicians' own estimates.

CHAPTER VIII

ONTARIO'S CHANGING AGE PATTERN

The age composition of the population of the Province of Ontario has changed notably since the turn of the century. The decline in mortality at ages under 60 years and the persistent fall in the birth rate have combined to produce an "older" population.

Table J15 shows the actual number of the population of the province in selected age groups for the census years from 1901 to 1951. The age groups chosen are those which will be of practical

and general interest. The figures used for 1951 are estimates only.

This shows the age structure of the population of the province as a whole. There are wide variations, however, in the age composition of the population in individual cities, towns, counties and districts. Knowledge of the age structure of the population in local areas is helpful in planning public health programs.

TABLE J15
POPULATION OF ONTARIO, CENSUS YEARS - 1901-1951

Year	Age Group						Total
	Under 15	15-34	35-44	45-54	55-64	65 & over	
	Number						
1901	685,000	777,000	270,000	193,000	133,000	120,000	2,183,000 [★]
1911	740,000	909,000	321,000	249,000	159,000	142,000	2,527,000 [★]
1921	885,000	956,000	406,000	302,000	209,000	172,000	2,934,000 [★]
1931	959,000	1,127,000	475,000	384,000	252,000	234,000	3,432,000 [★]
1941	924,000	1,265,000	519,000	447,000	332,000	301,000	3,788,000
Est. 1951 ^x	1,227,000	1,388,000	629,000	525,000	425,000	418,000	4,612,000
	Per Cent						
1901	31.4	35.6	12.4	8.8	6.1	5.5	100.0
1911	29.3	36.0	12.7	9.9	6.3	5.6	100.0
1921	30.2	32.6	13.8	10.3	7.1	5.9	100.0
1931	27.9	32.8	13.8	11.2	7.3	6.8	100.0
1941	24.4	33.4	13.7	11.8	8.8	7.9	100.0
Est. 1951 ^x	26.6	30.1	13.6	11.4	9.2	9.1	100.0

[★]Including some for whom age was not stated.

^xEstimated population. As 1951 is a census year the figures (estimated) for 1951 will change according to the findings of the census. The 1951 figures should therefore be considered as estimates only. The third annual economic survey prepared by the Ontario Bureau of Statistics and Research gave an estimated total population of 4,405,974 for the province of Ontario in 1949, but did not show age groups.

CHAPTER IX

VOLUNTARY ORGANIZATIONS

The Canadian Red Cross Society, Ontario Division

The Ontario Division, which is the oldest division of the Canadian Red Cross Society, had 280 branches throughout the province in 1948, each serving its own area, and carrying on a variety of activities.

Of the division's total expenditure of \$2,526,154.00 for the year 1948, the major part, \$1,196,210.91, was spent on the 27 outpost hospitals and nursing stations, for the upkeep of their buildings and equipment, and for construction. Only a little over \$350,000 was received during the year in payment from patients. The work being done in these outposts is important, since in many outlying districts there are no other medical centres. During 1948, 2,124 births were recorded in the hospitals, and 60 more home confinements. There were 8,545 admissions, requiring 68,760 days of care. The total bed capacity of the outposts was 245, with 82 bassinets.

Other phases of the work of the Red Cross included volunteer nursing, nutrition and home-makers service, the Red Cross dental coaches, teaching of swimming and water safety, assisting in the maintenance of highway first aid posts, and blood donor services. The last mentioned activity was only beginning in Ontario in 1948.

One of the Red Cross's most highly publicized activities is the emergency work called disaster relief. In 1948, the amount spent on this work was just short of \$900 and this had increased to more than \$4,500 in 1950. All disaster relief work is done voluntarily, and the only expenses are for food and clothing distributed.

Health League of Canada

Founded in 1919 as the Canadian Council for Social Hygiene, for the specific purpose of combating venereal disease by means of public enlightenment, this national voluntary health education organization became the Health League of Canada in 1935. Its program has gradually extended throughout the fields of disease prevention and positive health improvement until today it embraces the following areas: child and maternal health, immunization, industrial health, nutrition, pasteurization, foodhandling, social hygiene, mental health, alcoholism, and geriatrics.

The Health League publishes *HEALTH*, a national bi-monthly magazine for the public. It maintains a nation-wide press and radio health information service, and distributes authoritative films, posters and pamphlets on health. Through the Health League, 61 other lay and professional organizations also further their work in the interests of public health education.

The last available annual statement (for the year ended April 30, 1949), reports that the Health League spent \$111,771.83 in the interests of health education in the previous 12 months. This is the all-Canada figure, and expenditures for the Province of Ontario are not shown separately. National headquarters of the League is in Toronto.

The St. John Ambulance Association

The objectives of the St. John Ambulance Association are to provide first aid at public gatherings; to instruct the public in first aid, home nursing and child welfare; to blood-type the public in order to facilitate emergency blood transfusions; and to operate the Ontario highway first aid system, with the assistance of the Ontario Motor League and the Canadian Red Cross Society, Ontario Division.

St. John Ambulance, the public service branch of the Order of St. John of Jerusalem, operates throughout the Empire. The "Priory" in Canada is divided into provincial councils, and Ontario is divided into five districts. In 1948, there were 116 units of volunteers in the province, composed of 45 mens' ambulance units, 40 women's nursing units, 12 boy's ambulance units and 19 girls' nursing units. The total volunteer strength in Ontario in 1948 was 2,600 persons. There was a small full-time paid staff at the provincial headquarters.

St. John Ambulance works with the medical and nursing professions and other organizations. There were 9,108 persons trained in first aid, 796 in home nursing, and 73 in child welfare during the year 1948, a total of 9,977. Members of the association attended to 8,195 cases of accident or illness during 1948.

In 1949, a program of expansion was initiated which resulted in 13,328 being trained in first aid, home nursing and child welfare.

**REPORT OF THE ONTARIO
HEALTH SURVEY COMMITTEE**

SECTION K

HANDICAPPING CONDITIONS IN CHILDREN

(Pages 417 to 438)

K. HANDICAPPING CONDITIONS IN CHILDREN

CONTENTS

	Page
Summary	420
Recommendations	421
Chapter I: Governmental Services	422
Chapter II: Voluntary or Nongovernmental Services	426
Chapter III: Extent of Problem of Crippling Conditions in Children in Ontario	431
Chapter IV: Estimates of Handicapping Conditions in Children from Other Sources	433
Chapter V: Summary of 1949-50 Handicapped Children Survey Conducted by Hamilton, Ontario, Board of Health	434
Chapter VI: Study of Handicapping Records in One Ontario Township	437

HANDICAPPING CONDITIONS IN CHILDREN

SUMMARY

As in many other segments of the health field, activities in aid of children with handicapping conditions are shared by governmental and voluntary agencies. Chapter I of this section describes the nature and extent of the former, Chapter II of the latter.

There is a great deal of valuable work being done under these two auspices but there would also appear to be a lack of coordination which tends to decrease the effectiveness of their respective efforts. For example, neither the voluntary organizations nor the provincial Department of Health can tell how many children with handicapping conditions there are in Ontario, nor what proportion of the total is receiving some assistance. The establishment of an efficient system for registering, classifying and following up such cases discovered anywhere in the province would seem to be a prime need.

Such registration would, of course, make it necessary to establish an acceptable definition of handicapping conditions in children and also certain standards for their classification. For the purposes of its own study, the Survey Committee in consultation with authorities in this field, used the following definition: "A handicapped child is a person under the age of twenty-one years who, because of congenital or acquired defect, is or is likely to be limited in normal activity". An effort was made in framing this definition to go beyond orthopaedic cases to include those where the handicapping is mental or even social, for example, cases of disfigurement.

Chapter V gives a summary of the results of a comprehensive survey conducted during 1949-50 by the Hamilton, Ontario, board of health. There were approximately 45,000 children in the population of the city - 30,000 of school age and 15,000 pre-school. In this group, 783 children with handicapping conditions were discovered - 575 in the school age group (approximately 19 per 1,000), and 208 pre-school (approximately 14 per 1,000). Hamilton public health authorities do not claim this to be a complete total, although it does represent the results of medical screening of all cases reported by public health nurses, board of education, hospitals and voluntary societies. Of the 783 total, 22 per cent represented congenital malformations, 30 per cent conditions primarily affecting bone, joint and muscle and 48

per cent other organic and mental defects.

In an effort to test the value of available records on handicapping conditions in children, the Survey Committee made a study of the records of one township in southwestern Ontario. This covered an urban population of 6,920 with a school enrolment of 1,648; and a rural population of 6,303 with 902 school children. Details of this study, reported in Chapter VI, indicate that such records leave much to be desired. So far as could be determined, there were 128 children in the town and 71 in the surrounding township whose condition called for treatment, training or special placement in employment or institutions (See Table K7).

The necessity of transporting handicapped children from remote parts of the province for specialist treatment in larger city hospitals, and the expense involved, have undoubtedly been factors in deterring treatment in the past. This is less true today, however, as there is a wider distribution of the facilities and skills essential to this type of medical work. Since 1943, for example, the provincial government has paid the cost of treating poliomyelitis cases on their first admission to 10 public general and isolation hospitals situated in seven Ontario cities.

In dealing with the problem of handicapped young people, it is impossible to separate the physical and educational phases of their adjustment to society. The work of "auxiliary education" therefore, has been considered by the Survey Committee. The Auxiliary Classes Act was passed in 1914, and since that time auxiliary education has been developed by the Ontario Department of Education and local school boards to the point where there were more than 500 special classes located in Ontario cities and towns, and some 2,000 sight-saving, speech correction, orthopaedic and opportunity units located in the smaller communities and rural sections. At the time of this survey there were 500 teachers engaged full time and approximately 1,500 part time in meeting the special needs of seriously handicapped pupils, according to the annual report of the Minister of Education for Ontario. Table K1 gives some indication of the extent of educational work among various classifications and auxiliary classes.

HANDICAPPING CONDITIONS IN CHILDREN

RECOMMENDATIONS

It is recommended that:-

- 1 - A central registry be maintained to which all agencies in the field of public health shall be required to report discoveries of handicapping conditions in children.
- 2 - In areas which have public health services, discovery and registration of handicapped children be made one of their normal functions, and that in unorganized territory this be made a function of the Ontario Department of Health.
- 3 - Specialist clinics of the type sponsored by voluntary organizations be held periodically, and that where possible these be held in the community hospital.
- 4 - The provincial government payment for the treatment of poliomyelitis be extended to include the hospitalization of patients who require to be readmitted.
- 5 - In planning an overall program for registration, treatment, education and rehabilitation of handicapped children, that there be close liaison between the Ontario Departments of Health and of Education, and in particular that the extensive information available in the latter department be utilized by the Health Department in planning the treatment and rehabilitation of handicapped children.

CHAPTER I

GOVERNMENTAL SERVICES

Ontario Department of Health, Division of Maternal & Child Hygiene

The primary function of this division has been the promotion of better health services for mothers and infants. This division is concerned only with the preventive aspects of the subject and has no special projects in the interests of children already found to be handicapped.

Ontario Department of Health, Division of Epidemiology

Since 1943 an arrangement has been in effect whereby the Province of Ontario pays the following hospitals for services given to poliomyelitis cases admitted; the cost of special nursing services if care in a respirator is required, and the cost of treatments in out-patient departments following discharge, viz:-

Hamilton	- Hamilton General Hospital
London	- Victoria Hospital
Ottawa	- Civic Hospital
	Ottawa General Hospital
Toronto	- Riverdale Isolation Hospital
	Hospital for Sick Children
	Toronto General Hospital
Kingston	- General Hospital
Port Arthur	- General Hospital
Windsor	- Fred Adams Hospital

Each of these hospitals has set up a poliomyelitis board comprised of the chief of medical staff and representation from its medical, orthopaedic, paediatric and neurological staffs. The poliomyelitis board is responsible for diagnosis and treatment of cases admitted to hospital and is thus enabled to give advice and guidance to the program.

Services given by the hospitals under the program include:

1. Treatment in the acute stages of the disease.
2. Nursing service.
3. Physiotherapy.
4. Out-patient treatment.

5. When patients are discharged, those with paralysis are referred to the Ontario Society for Crippled Children for classification and follow-up by their visiting nursing staff who work in conjunction with the public health nurse and the family physician.

Hospitalization and treatment costs are paid by the Ontario government for first admissions only. Frequently it is necessary for a poliomyelitis patient to return to hospital in two or three years time for corrective surgery. Although this may be the most expensive stage of treatment, there is no provision for financial aid.

Orthopaedic surgery or other professional medical services are not paid for by the provincial government but are provided by the voluntary efforts of the poliomyelitis boards and the medical staffs of these hospitals.

Ontario Department of Education

It is recognized that academic instruction in accordance with the pupil's mental capacity, is essential in the treatment of the handicapped child from a humane standpoint and also as it affects his future earning ability.

A section of the Auxiliary Classes Act, R.S.O. 1950, c. 29, indicates what may be done by way of providing special classes for handicapped children. It states that a school board "may establish and conduct classes for children who, not being persons whose mental capacity is incapable of development beyond that of child of normal mentality at eight years of age, are from any physical or mental cause unable to take proper advantage of the ordinary public, or separate, high or vocational school courses".

The act further provides that "Where a board has established auxiliary classes, it shall be its duty to provide for the proper supervision of the health and treatment of every pupil attending the classes and for the proper medical treatment of every pupil who appears to the principal or inspector to require the same".

"The board may direct the school medical inspector or such other officer as the board may appoint to visit pupils in their homes and to consult and advise with their parents as to their treatment and the conditions which will best enable the pupils to attain the greatest possible degree of intelligence and education".

To prepare for this special field of activity, auxiliary teachers are required to attend a summer course. Prerequisites are that the candidate hold a teacher's certificate, have at least two years teaching experience and have the necessary personal qualifications for this exacting task.

Auxiliary education for the handicapped in

the province had developed by 1948 to the point where there were 512 special classes located in the cities and towns of Ontario; and approximately 2,000 opportunity, sight-saving, speech correction and orthopaedic units located in the smaller cities, towns, villages and rural sections. Approximately 500 full-time teachers and at least 1,500 part-time teachers are joined with the officials in the Auxiliary Education Branch in serving the needs of handicapped pupils from the report of the Ontario Department of Education, 1948, page 43. The total enrolment for 1948

was 15,818. Of these 9,702 were boys and 6,116 girls.

Two orthopaedic classes were started in Ottawa in 1926 and later one was formed in Essex. In all there were 8 orthopaedic classes in operation in 1948 and this number has since been increased to 18.

A summary of auxiliary classes for 1948 appears in Table K1.

TABLE K1

AUXILIARY CLASSES FOR HANDICAPPED CHILDREN IN ONTARIO, 1948

Classes	Number of Teachers	Enrolment	Boys	Girls
Opportunity classes for backward and psychopathic children	179	3,384	2,202	1,182
Partial classes for backward and psychopathic children	2	21	15	6
Handicraft and special industrial classes for 13 years and over	171	3,623	2,403	1,220
Opportunity units	72	264	173	91
Orthopaedic classes for disabled children ^A	7	95	51	44
Hospital classes for children	9	194	112	82
Sanatoria classes for children	41	480	251	229
Open air classes	15	434	198	236
Transportation units	2	2	2	
Hard-of-hearing classes	8	86	43	43
Oral (deaf)	11	84	45	39
Speech correction and lip reading	15	3,360	2,167	1,193
Sight-saving classes for children with impaired vision	10	112	64	48
Home instruction classes for children disabled not less than 3 months	27	353	184	169
Institutional classes for inmates of children's homes, shelters, etc.,	2	58	34	24
Rural and urban home instruction units for sick and crippled children	96	100	56	44
Rural and urban sight-saving units for children with defective eyesight	94	102	50	52
Total	761	12,752	8,050	4,702

^ABy 1951, the number of orthopaedic classes for disabled children had been increased to 20:- Toronto 6, Variety Village 4, Windsor 2, Woodedon 2, Chatham 1, London 1, Hamilton 1, Ottawa 3.

Many other cases, such as lame children, are in the regular classes as well and are not included in the above.

The Ontario School for the Blind

The Ontario School for the Blind at Brantford is operated by the Ontario Department of Education for the blind children of the province under a special act establishing schools for the blind and for the deaf. Living accommodation is provided without charge to residents of Ontario. Some students from Manitoba, Saskatchewan and Alberta are taken by arrangement. The enrolment as of June 1948, was 171, of whom 98 were boys and 73 were girls. Of

these 117 were residents of Ontario. Children start their education in this school at the age of six years and may continue in the same school until they reach the age of 21. The course offered is primarily academic although there is a great deal of extra-curricular activity. Students may complete their junior matriculation at the school, graduations being held twice a year. Musical training and choral work in particular receive a great deal of emphasis. Other vocational training given includes basket weaving, domestic science for girls and piano tuning

for boys. More specialized vocational training is provided for these young people by the Institute for the Blind after they leave the school. In general they are given an academic education and are assisted to adapt themselves to their handicap.

The Ontario School for the Deaf

The Ontario School for the Deaf was established in 1880 at Belleville. As in the School for the Blind, living accommodation is provided without charge to young people who are residents of Ontario, but there is no arrangement for taking students from outside the province. In 1948, the enrolment was 335, which is the largest number on record at the school. The residences and classrooms were planned for 300 pupils. The dormitories, however, were spacious and it was possible to accommodate the larger number without discomfort.

Speech training and lip reading are of necessity taught first. If these skills can be mastered, an academic education is given. Vocational courses which may be taken include beauty culture, sewing, typing, business practice, and domestic science for girls, while boys can take up printing, woodworking, carpentry, welding, farm mechanics and business practice.

In addition to the residential school at Belleville, there are 24 auxiliary classes in Ontario for the deaf and hard-of-hearing. Thirteen of these classes are located in Toronto schools, six at London, three at Hamilton, one at Windsor, and one at Ottawa. Nineteen teachers are engaged in this work.

Fifteen auxiliary speech correction and lip reading classes are maintained at schools in nine centres; Toronto and the York townships have nine classes; Hamilton two, Ottawa one, Brantford one, Kitchener one, and London one.

There is an auxiliary blind-deaf class in Almonte and another in Newmarket.

Ontario Department of Welfare, Division of Child Welfare

Since the conditions under which the handicapped child lives in the community have a direct bearing on his health, some reference to the facilities of the Ontario Department of Welfare is included.

Under the Division of Child Welfare, the activities of the Children's Aid Societies, the charitable institutions serving children, and the day nurseries, have been coordinated.

There were 64,170 children under the supervision of the Division of Child Welfare during 1948, including those in the care of the Children's Aid Societies, those receiving protection and help in their own homes, and those in day nurseries and institutions.

Directly under the care of the Children's Aid Societies, were 19,072 children in foster homes, wage homes, boarding homes, shelters and other institutions, including 256 in mental hospitals. Of the children receiving protection, 784 were considered to be suffering from mental defect or mental illness and 638 presented personality problems. Close to 300 children, living outside of their homes, were so emotionally disturbed that they were in need of institutional care but no facilities were available.

Sight-Saving Classes and Units

Sight-saving classes are arranged exclusively for children who require special visual care. There were 10 such special classes in the province at the time of this survey. There were also 250 sight-saving units in use in Ontario schools, providing magnatype books and other sight-saving materials for the use of pupils with defective vision in regular school classes. These materials are provided where they are recommended on the advice of a doctor.

Toronto, in 1948, with an enrolment of 96,689 pupils in public elementary and secondary schools, had four elementary sight-saving classes and one secondary class. The Separate Schools of Toronto with 10,463 pupils were using 11 sight-saving units.

Sight-saving classes have been maintained in Toronto, Ottawa, Hamilton, London and Windsor for 20 years and one has recently been inaugurated in Second School, East York Township.

Speech Therapy

One of the important features in the treatment of the cerebral palsied child is speech training. It is readily understandable that the child's ability or inability to express his ideas may be a determining factor in the success or failure of any plan of education.

While it is agreed that speech correction in auxiliary classes is most necessary, many of the children and especially the cerebral palsied group, have handicaps which should receive intensive treatment in speech clinics.

Speech clinics are established at the Hospital for Sick Children and at Sunnybrook Hospital, Toronto. These clinics employ the services of three professional speech therapists who received their degrees from universities outside of Canada.

Wellesley Orthopaedic School

Wellesley Orthopaedic School is located in Toronto. In order to provide accessible classrooms for orthopaedically handicapped children, the Toronto Board of Education, in April 1926, equipped the main floor of the grade school building with ramps and other necessities.

Many of the orthopaedic children are in wheel-chairs or on crutches, and have to be transported by bus.

The teachers are assisted by a physiotherapist and an occupational therapist, who carry on instruction extra-murally as well as in the classroom.

The school is prepared to take the pupil up to Grade X. Enrolment fluctuates considerably during the year due in some instances to the variety of handicaps under which the pupils are laboring. At the end of June, 1948, the classroom enrolment was 64, the homebound enrolment was 125. Of those discontinuing during the year, six were sent to private schools, 15 ceased because of illness

and the remainder were enabled to return to regular grade school instruction.

The percentage of promotion for 1948 was 77.5 per cent. Seven out of eight Grade VIII pupils gained high school entrance. Of these, there are attending collegiate and one is taking a business course.

Federal Government Crippled Children's Grant

Under the federal health grant program a yearly grant of \$158,777 has been made available to Ontario by the federal government and administered by the province for the promotion of better and more complete services for crippled children.

CHAPTER II

VOLUNTARY OR NONGOVERNMENTAL SERVICES

Public General Hospitals

While the facilities and services of all community hospitals are available to the handicapped child, there are special facilities at certain centres.

Of the government rated bed capacity of

15,212 beds in public general hospitals in Ontario in 1948, 1,108 or 7.28 per cent were designated as paediatric beds or cribs. The largest number (432) of these were in the Hospital for Sick Children, Toronto. The regional distribution is set down in Table K2.

TABLE K2
PAEDIATRIC BEDS OR CRIBS IN GENERAL HOSPITALS IN ONTARIO, 1948

Region	Paediatric Beds	Adult and Children Beds	% of Total Bed Capacity
1	268	2,642	10.14
2	124	2,140	5.80
3	476 ^x	6,056	7.86
4	57	992	5.75
5	89	1,686	5.28
6	41	878	4.70
7	53	818	6.48
Ontario	1,108	15,212	7.28

^x Hospital for Sick Children, Toronto has 432 beds.

I.O.D.E. Preventorium

This institution, located in Toronto, is devoted almost entirely to the active treatment of tuberculosis and is dealt with in Section G on the Prevention, Treatment and Control of Tuberculosis in Volume II, Report of the Ontario Health Survey Committee.

Patients are admitted through the clinics of the Hospital for Sick Children.

Home for Incurable Children

The Home for Incurable Children, Toronto operated under the direction of a board, accommodates 20 boys and 20 girls.

The children admitted have incurable physical disabilities, mostly of congenital origin. Mentally afflicted children are not usually accepted. The ages of the children range from one to 16 years at which time they may be transferred to the Queen Elizabeth Hospital, Toronto.

All children admitted to the home will not require to be in an institution for life. Some learn useful crafts which enable them to leave the home and contribute to their own support.

The Toronto Board of Education supplies the home with one teacher who has had auxiliary class training. All elementary grades are taught.

Other Accommodation For Chronically Ill Children

The East Windsor Hospital also admits a number of children with chronic illnesses, owing to the lack of other special accommodation. On occasion other hospitals offering long-term care may admit a child, under special circumstances.

Children's Convalescent Camp, Burlington, Ontario

This camp is operated by the women's auxiliary of Hamilton General Hospital. Children, ranging in age from five to ten years, are selected by the social service department of Hamilton General Hospital, and are given one month's holiday. Three registered nurses and an occupational therapist are available during a two-month summer period.

Illahee Lodge, Cobourg, Ontario

Illahee Lodge, a summer camp for children suffering from heart, chest and diabetic conditions, is sponsored and financed by the Kinsmen Clubs of Toronto and operated by the Neighbourhood Workers Association. Approximately 150 children (85 girls

and 65 boys,) eight to 14 years of age can be accommodated in three groups during the summer months. The individual needs of the children are studied and program limitations and special diets arranged where necessary. Medical attention is given by senior internes from the Hospital for Sick Children.

Variety Village, Scarborough, Ontario.

This is a residential vocational training school for orthopaedically handicapped youth which was opened in September, 1949.

The 24 pupils are selected by the Ontario Society for Crippled Children and the cost of their stay at Variety Village is financed by the Variety Club of Toronto.

The Ontario Department of Education supports the Variety Village School by means of the following grants:

(a) A grant of 50 per cent of the cost of instruction (teaching and teaching equipment).

(b) An auxiliary grant as an orthopaedic class up to a maximum of \$600.00 a year per teacher. There were five teachers in 1950.

The pupils accepted at the present time are 16-18 years of age. They receive training in the basic processes underlying industrial arts and crafts, in commercial work, in the operating of small business machines and in watch repairing.

Special attention by a professional staff is given to the medical and recreational needs of the students. Necessary treatments are supervised by a medical advisory committee working with the Toronto East General and Orthopaedic Hospital.

During the summer months, Variety Village houses the children and staff from Woodeden, a residential training centre for cerebral palsied children which is operated by the Ontario Society for Crippled Children. This is done so that Woodeden may be operated as a summer convalescent centre.

Ontario Society for Crippled Children

The Ontario Society for Crippled Children was organized in 1922 by a group of six service clubs. In 1928 the first staff member was appointed and an office was opened in the name of the society. Since that time it has received support from many other service clubs in the province.

Grants to the society from the Ontario government also began in 1928, and from that time until 1948, a total of \$141,000 had been paid by the province. The 1948 grant amounted to \$6,000. A portion of the federal government grant to Ontario for aiding crippled children has also been allocated to the society. Government grants reported in the society's financial statement for the year ended May 31, 1950, totalled \$55,578.26.

Receipts including balance brought forward from the previous period, were reported at \$450,910.38 for the year ended May 31, 1950. According to the society's auditors, however, receipts for the 1950 Easter Seal campaign were not complete at the time of the report, so they were held in a separate bank account and were not brought into the general accounts.

It is the society's purpose to serve the needs of orthopaedically handicapped children discovered in Ontario. This includes the cerebral palsied, and it aims particularly at seeing that medical treatment is received. The society's basic service is its nursing service. The nursing staff includes a director of nursing, two assistant directors, 11 district nurses and one physiotherapist, all graduates in public health with special training in orthopaedics.

The nursing staff works out of eight district offices across the province.

The society owns three summer convalescent camps for children and a residential training centre for cerebral palsied children. At the request of the Variety Club of Toronto it also operates Variety Village, a residential vocational school for orthopaedically handicapped boys which was built and is maintained by the Variety Club as noted earlier in this chapter.

In 1937, the society organized Blue Mountain summer convalescent camp near Collingwood, Ontario, with accommodation for 45 children. Four groups attend during the summer season, each staying for three weeks. This brings recreational and therapeutic facilities to 180 children each year. A professional staff is employed to serve the needs of a variety of disabilities.

In 1946, Woodeden, at Kilworth, Ontario, was established as a summer convalescent centre for orthopaedically handicapped children. It accommodated groups of 40 children for periods of three weeks. Since November, 1949, Woodeden has operated a residential training centre for cerebral palsied children, financed in part by a provincial government grant. It accommodates 20 patients between the ages of three and six. The staff includes a superintendent, who is a registered nurse; a director of training, who is a physiotherapist; an assistant physiotherapist; occupational therapist; speech therapist; nursery school teacher; and the necessary attendants and domestic staff. During the summer these cerebral palsied children and staff are transferred to Variety Village, near Toronto, to permit the use of Woodeden as a summer convalescent centre.

Merrywood-on-the-Rideau at Rideau Lake, Ontario was opened in 1948, providing further summer camp accommodation for groups of 30 children. Four such groups attend in the course of a season, each staying three weeks.

Health Programs of Service Clubs

The service clubs of the province have

played an important part in discovering and helping handicapped children.

A fairly complete network of service clubs covers almost every city, and a part of the rural areas of Ontario. The Survey Committee secured information from 138 clubs. Of these, 114 were able to give actual figures showing that in 1948 they had allocated a total of \$497,666.69 to health programs. Some of the clubs have been active in this field for as long as 30 years with a continuous record of contributions.

During 1948, service clubs throughout the province gave support to the fight against tuberculosis and cancer, lending their executive aid as well as providing funds. The various clubs have contributed equipment to hospitals, equipped and prepared to operate a rheumatic heart clinic, supported hydrotherapy classes for victims of poliomyelitis, installed swimming and bathing pools, financed dental examinations of school children and treatment where parents were unable to pay, conducted sight-saving clinics, providing glasses and treatment where necessary, and participated in health education.

Women's Organizations

The women's organizations of the province including church, social, business, school, community and rural groups, have provided funds for coordinated efforts in the health field and have formed a liaison between their communities and public health authorities.

Cerebral Palsy Parents' Groups

In November, 1947, Cerebral Palsy Parents' Associations were organized in Toronto, Windsor, London, and Chatham with the primary purpose of parent education. It is the aim of these organizations to obtain information on the degree and type of handicap in the child, with a view to helping both the parents and their children. Recently groups have been organized in Sarnia, Ottawa, St. Catharines and Port Arthur-Fort William.

The Kent County Parents Association, at Chatham, has a membership of 95 although not all of these are parents of cerebral palsied children. They planned to obtain the facilities of a hospital school and clinic for the 31 cerebral palsied cases, of a total of 65 orthopaedically handicapped children from the district.

In London a clinic for cerebral palsied children is held at the Victoria Hospital. In addition, since December, 1949, there has been a class of 16 children enrolled at the Princess Elizabeth School.

In Toronto, parents attend night classes at Wellesley School to learn how to instruct their children who are too old to attend the Junior League

Carlton Street School, or whose condition makes them ineligible for admission to Wellesley School.

The Ontario Federation for the Cerebral Palsied

The Ontario Federation for the Cerebral Palsied was organized in 1949, to coordinate the work being done for cerebral palsied children. It maintains liaison with the Ontario Society for Crippled Children, the Cerebral Palsy Parents Groups and service clubs. One of its major activities is assisting in the organization of cerebral palsy parent groups throughout the province.

Cerebral Palsy Clinic and Nursery School

This project, organized by the Junior League of Canada, is to be financed and operated by them for five years. It occupies three separate rooms of the Carlton Street United Church Sunday School, Toronto. Living-in accommodation is not provided. One room is equipped for occupational therapy, a second for physiotherapy and the third is a classroom with equipment designed for cerebral palsied children.

The staff includes a physiotherapist, an occupational therapist, a nursery school teacher and a part-time speech therapist. Volunteers provide transportation for the children between their homes and the school.

The clinic serves the greater Toronto area. Children attending have a monthly check-up at the Hospital for Sick Children.

As part of the program, the mothers attend the school occasionally to learn procedures which may be carried out at home.

Enrolment at the time of this survey was 14 and six of these attend the nursery school.

Toronto Occupational Therapy Centre

This centre which is under the direction of a board composed of professional and lay people, has facilities for treating 40 to 50 patients monthly at the centre plus 40 more each month in their homes. Approximately half the patients are children. There is no residential accommodation. One station wagon serves the two home-visiting therapists.

The director and staff of the centre are all registered therapists. There are two therapists in the home service visiting department and three therapists (including the director) for the centre service.

Cases treated include cardiac defects, cerebral palsy, orthopaedic defects, arthritic defects, and behaviour problems.

Patients are referred to the centre by physicians, public health nurses, out-patient departments, the Toronto Board of Education, Institute of

Child Study, convalescent hospitals and the Workmen's Compensation Board.

The City of Toronto assumes no financial responsibility for the support of nonpaying cases at the centre. The work is supported by the Community Chest, interested individuals and patient fees which vary from 25 cents to \$2.00 per treatment.

The centre also serves an education purpose. Second and third year students in occupational therapy at the University of Toronto attend the centre for demonstrations and on graduation serve two three-month periods of internship.

Windsor Red Cross Curative Workshop

Under the sponsorship of the local branch of the Canadian Red Cross Society, the Curative Workshop in Windsor, Ontario, has been in operation for a number of years, serving both children and adults.

The treatment staff consists of a director, assistant director (both occupational therapists), two full-time assistant occupational therapists and one part time in charge of home service, one physiotherapy supervisor and two assistant physiotherapists.

Members of the professional staff are graduates of recognized courses in physiotherapy and occupational therapy.

Transportation to and from occupational therapy centres has always been a problem for the handicapped. The curative workshop has two drivers and a carrier to transport the children in Red Cross vehicles.

During 1948, there were 1,681 physiotherapy and 2,331 occupational therapy treatments given as well as 2,726 combined treatments.

At the present time, there is an average of 180 patients a month, - 60 children and 120 adults.

The accommodation consists of seven large rooms plus offices and a treatment pool. There is an education set-up operating in the workshop. The local branch of the Canadian Red Cross provides the services of a teacher for academic instruction and speech therapy on a full-time basis.

Brantford Occupational Therapy Centre

This centre, sponsored by the local branch of the Canadian Red Cross Society, has been operating since 1947, with facilities for both adults and children. There are three rooms in use which will accommodate approximately 25 patients. The staff consists of one occupational therapist who also makes home visits and spends two and a half days a week at the Brantford General Hospital.

The Hamilton Association of Occupational Therapy

This organization has been established

since 1935. It has facilities to treat 75 patients per month. The staff consists of three occupational therapists and one physiotherapist. Therapy given is largely of the vocational type. Members of the staff also make hospital visits if required. The Hamilton General Hospital pays \$500.00 annually for services from the association.

Canadian National Institute for the Blind

The Canadian National Institute for the Blind, which had its beginning in 1918, is a national organization with headquarters in Toronto. It maintains divisions in other parts of Canada. The institute works closely with the Department of Education in matters of mutual concern, for example the Ontario School for the Blind at Brantford, and visits homes in Ontario that are known to have blind children under six years of age. The parents are counselled to the end that the children may be allowed to develop a high degree of independence and be ready to attend the school for the blind when they reach six years of age. The institute also provides guidance, vocational training and placement assistance for young people when they leave the school.

The institute maintains a library in Toronto which contains hundreds of books in braille and moon type as well as talking book records. On request, these are sent postage free to all parts of Canada for the use of those with impaired sight.

In the professional category, the institute employs a librarian, a vocational guidance counsellor, three trained social workers, one consultant ophthalmologist, and two public health nurses. It also employs a number of trained nonprofessional personnel; 16 field secretaries, 14 special vocational teachers for Ontario, four placement officers for Ontario, ten supervisors for sales stand work in Ontario, one business manager, one business director, two business secretaries and one music consultant.

The institute cooperates with the Society for the Deaf, Ontario Society for Crippled Children, service clubs, Departments of Health and Education, Children's Aid Society and other voluntary agencies as well as with physicians and specialists. The institute provides consultation services and if necessary, glasses and artificial eyes for school children. Where parents are unable to pay, these services are free. The field staff of the institute speaks to children, service clubs and church groups throughout the province, stressing the need for proper care and treatment of the eyes. Bursaries are donated to blind or nearly blind boys and girls with promising academic standing to specialize at university or in music.

National Society for the Deaf and Hard-of-Hearing

In Ontario, a start has been made in seeking out children with impaired hearing through public health staffs and school nurses. It is obvious that nothing is accomplished by the discovery of the deaf and hard-of-hearing children unless every effort

is made to give effect to the findings and prescription of the examining otologists. This has been made a major objective of the society's program.

The society offers a list of services designed to help the individual with impaired hearing. These services include:

1. An initial consultation to determine the problem and needs of the individual,
2. Reference to otologists, physicians and clinics,
3. Special counsel and explanation of hearing-aid operation, especially to children,

4. Assistance in lip reading,
5. Personal adjustment aid to relieve emotional stress,
6. Placement service,
7. The dissemination of information concerning the problem to parents of preschool children, public health nurses, welfare units and teachers.

A report on each child is sent to physicians, public health nurses, or educators, by whom the child was referred. A routine check has been established which ensures that the prescribed treatment, therapeutic measures, or educational adjustment are followed. Arrangements are also made for retesting.

CHAPTER III

EXTENT OF PROBLEM OF CRIPPLING CONDITIONS IN CHILDREN IN ONTARIO

While some estimates have been made as to the number of crippled children and the causes of their disabilities, there is no exact information available. The following estimates, therefore, are presented with reservations.

Population under 21 Years of Age

The total population under 21 years of age in Ontario in 1948 was estimated at 1,497,980 or 35.2 per cent of the whole population of the province. At June 30, 1948, 690,592 were enrolled in the Ontario schools. Of these, 564,529 (81.74 per cent) were in elementary schools (public and separate, and 126,083 (18.26 per cent) were in secondary schools including vocational schools.

Poliomyelitis

Poliomyelitis or infantile paralysis is responsible for a considerable portion of the orthopaedic handicapping, but not to the extent popularly believed. About 20 per cent of orthopaedic crippling is now attributed to "polio". Of 1,135 cases diagnosed and reported in Ontario in 1949, 730 or 64.32 per cent were non-paralytic types while 405 had varying degrees of paralysis. In 1949, out of every 100 cases diagnosed and reported, 65 were not paralysed, 25 had paralysis with a modern degree of disability while 10 were paralysed with serious disability. Of the 25 moderately disabled, 15 would be employable.

Poliomyelitis is a recurring and constant cause of crippling as is indicated by statistics supplied by the Ontario Department of Health. (see Table K3)

The incidence rate of the disease for 1948 was 8.7 per 100,000 of population. In 1949, there were approximately 27 cases diagnosed per 100,000 population.

Cerebral Palsy

At the present time there is no means of determining the actual number of cerebral palsied children in the province. The private and public agencies may have lists of those who have come to their attention, but there are gaps and duplications which make the figures meaningless. The 1950 records of the Ontario Society for Crippled Children show 861 cerebral palsied children on their nurses' case load, 19.2 per cent of the 4,489 handicapped children known to them, but they claim to cover only 63.7 per cent of the population of Ontario and not all cases even in the territory covered are reported to them. For example, the society has 23 cases under supervision in Toronto district in 1949 while the city had a record of 150 cases in the city alone, and that was admittedly far short of the actual number.

Heart Disease Among Children in Toronto.

At the beginning of 1948, a project for the discovery, registration and management of heart disease in the children of Toronto was initiated by two Toronto physicians. The project was financed by a service club for a period of two and one-half years.

School children, preschool age children and children on the records of clinics and hospitals were examined.

Of 1,324 children examined, 291 had congenital abnormalities of the heart. Of the latter number, 29 died. Forty-five per cent of the 29 died in the first five days of life and 83 per cent of the 29 did not reach the age of one year.

Of the total number examined, 172 had rheumatic fever, of whom 120 had rheumatic heart disease.

TABLE K3
POLIOMYELITIS CASES IN ONTARIO, 1944-49

Year	Total Cases	Non-Paralysed	Paralysed	Percentage Nonparalysed
1944	332	175	157	52.7
1945	183	100	83	54.6
1946	512	277	235	54.1
1947	808	442	366	54.7
1948	370	203	167	54.8
1949	1,135	730	405	64.3
1950	372	254	118	68.3

Of 1,020 school children examined, whose attendance, disposition and progress cards showed a suspicion of heart ailment, 703 proved to have functional murmurs of no significance.

In Toronto, approximately 15 children with heart disease require the services of a visiting teacher because of their inability to attend school.

The possibility of having special auxiliary classes for children with heart conditions was considered by the City of Toronto but the opinion expressed by professional consultants was that it was inadvisable particularly from a psychological standpoint. If a child has a dangerous heart condition, he is confined to bed. If he is up and about, he will be able to attend regular classes in school although restricted so far as certain sports are concerned.

Blind

There are 160 blind children under the age of 16 in Ontario, according to the Canadian National Institute for the Blind, Ontario Division Register. However, this is no comprehensive register, nor are statistics available on the number of children suffering from defective vision, 16 years of age and under.

Colonel E. A. Baker, managing director of the Canadian National Institute for the Blind, estimates that for every sightless young person registered with the C.N.I.B. as blind, there are at least ten in the partially blind group ranging from 6/60 plus, up to 6/18. It is estimated that 80 per cent of the blind lose their sight in adult life.

Deaf and Hard-of-Hearing

The estimates of the National Society for the Deaf and Hard-of-Hearing are based on the 1941 census figures. Although the problem is probably greater because of a half-million increase in population, it would appear inadvisable to apply 1948 ratios on the basis of the 1941 figures because of recent advances in the treatment of middle ear conditions.

The number of totally deaf children recorded in Ontario in 1941 was as follows:

Preschool (ages one to four)	112
School (ages five to fifteen)	309
Total children under sixteen years	421

The number of hard-of-hearing children in the province was estimated to be as follows:

Preschool (ages one to four)	5,300
School (ages five to fifteen)	14,500
Total children under 16 years	19,800

It is estimated that there are about 1,300 children born each year in Ontario with hearing disabilities which will require discovery.

It should be understood that the Ontario figures quoted are estimated, but care has been taken that figures are minimal. There were 327 in attendance at the Ontario School for the Deaf, in Belleville; 32 in Clinton Street School, Toronto; and other deaf are being taught in special classes in Ottawa, in suburban Toronto, Hamilton and Windsor.

CHAPTER IV

ESTIMATES OF HANDICAPPING CONDITIONS IN CHILDREN, FROM OTHER SOURCES

The Cerebral Palsied

The report of the Cerebral Palsy Survey in Schenectady County, New York in 1948-49 is a contribution to the study of this problem. Government and voluntary agencies, as well as the medical services, collaborated in an intensive search of records in an effort to determine the number of cerebral palsied residing in the county. In addition, and in order to determine the number not known to physicians and other medical agencies, a house to house canvass was made of a representative sample of the county population. The sample covered 7,000 families, including 22,528 or about one-sixth of the population of the county.

This sample study, in turning up unreported cases in the preschool and postschool groups, enabled the survey to estimate the number remaining undiscovered in the county. On the basis of established records and sample findings, the Schenectady Survey estimates that in the county's population of 137,488, there are 209 cases of cerebral palsy of all ages, or 152 per 100,000 population. It was noted in this survey that the maximum prevalence rates appeared in the age groups five to nine and 10 to 14 years - about 591 and 450 cases per 100,000 of population of these age groups, respectively. The high prevalence rate at these ages may be accounted for by (1) natural reluctance of the family to have the child examined earlier so discovery is made only on admission to school and (2) the difficulties of diagnosis and classification in the infant and preschool age group.

At the prevalence rate of 152 cerebral palsied of all ages per 100,000 of population, arrived at through the findings of the Schenectady Survey, there would be a total of about 6,500 cerebral palsied children and adults in Ontario. Of these, a considerable number would still be at an age to benefit from training and education.

The Deaf and Hard-of-Hearing

The method of assessing the extent of handicapping by working out an index or percentage rate, using typical samples of the population was used by the National Society for the Deaf and Hard-of-Hearing. To quote from the society's report: "Hearing tests in Canada (Kitchener, Montreal, Battleford, London, Saint John, Oxford County, St. Boniface, Vancouver, Ottawa, and Halifax) show that the actual or potential incidence varies from two to four per cent of population".

Orthopaedically Handicapped Children

The Ontario Society for Crippled Children estimates that the total number of children with orthopaedic handicaps in Ontario is 3.5 per cent of the total population (approximately 15,000). This estimate is based on information and experience gained by the society in its county services. The society states that due to lack of complete information, the estimate cannot be taken as entirely correct, but states that in the province there are at least that many children with orthopaedic handicaps.

CHAPTER V

SUMMARY OF 1949-50 HANDICAPPED CHILDREN SURVEY CONDUCTED BY HAMILTON, ONTARIO, BOARD OF HEALTH

During 1949 and 1950, the board of health of the city of Hamilton, Ontario, maintained a register of handicapped children of school and preschool age.

In Hamilton there were approximately 30,000 children of school age and approximately 15,000 in the infant and preschool group, making a total of 45,000 children under 16 years of age in 1949.

The survey found 783 children with handicapping conditions; 575 in the school age group (approximately 19 per 1,000), and 208 preschool (approximately 14 per 1,000). Of the school age group, 173 were not in school at the time of the survey.

The registry, according to a statement made by Hamilton officials, while far from complete, has been developed by public health nurses investigating cases known to them in the schools, homes and elsewhere, and information received from the board of education, hospitals and voluntary societies. Practically all cases at the time of this report had been seen by a physician although diagnosis had not been completed in every case.

Table K4 illustrates the number of children which fall into three broad categories; congenital malformations, which include orthopaedic and other structural and organic disabilities; conditions affecting bone, joint and muscles, primarily concerning structure and locomotion; and the third group comprised essentially of other organic and mental defects.

There were 82 cases of cerebral palsy listed, a ratio of approximately 1.8 per 1,000 of child population under review; also 59 cases of heart disease, congenital or rheumatic, a ratio of approximately 1.3 per 1,000; and 88 cases of mental deficiency, a ratio of approximately 2.0 per 1,000 of children under 16.

The number classified as being mentally defective does not include all cases of this nature. Certain cerebral palsy and epileptic cases, for example, are mental defectives as well but are categorized under the physical condition. The report stresses that the number of defectives stated by no means represents the total picture. The totals do not include children in institutions and those undisclosed to the official agency. It is merely an expression of the numbers which have come to the attention of the city's board of health as problem cases.

Of the 402 handicapped children attending school, 331 or 82.5 per cent are in regular classes and 71 in special classes. The board of health suggests that 106 (or 32 per cent) of these children in regular classes should be given further consideration for special class placement and indicates the number noted in this respect.

It is assumed by those conducting the survey that probably 25 of the 52 children suggested for orthopaedic or physically handicapped class would be admitted to special classes if suitable facilities were available.

TABLE Table K4
GENERAL CLASSIFICATION OF DISABILITIES FOUND AMONG
HAMILTON CHILDREN OF SCHOOL AGE

	SCHOOL AGE		Preschool	Total	Per Cent of Total Defects	Rate Per 1,000 Children, Popula- tion Under Review (45,000 Children)
	In School	Not In School				
Congenital Malformations	82	15	75	172	22	3.8
Conditions Primarily Affecting Bone, Joint and Muscle	121	43	72	236	30	5.2
Other (including mental)	199	115	61	375	48	8.3
Total	402	173	208	783	100	17.3

TABLE K5
NUMBER OF HANDICAPPED HAMILTON CHILDREN IN REGULAR
CLASSES WHO MIGHT BE CONSIDERED FOR SPECIAL PLACEMENT

	Number of Children	Percentage
<u>Special Class</u>		
Orthopaedic or Physically Handicapped	52	50
Hard-of-Hearing	25	23
Vision Conservation	6	6
Auxiliary	7	6
<u>Institutions</u>		
Mental	15	14
Orthopaedic	1	1
Total	106	100

Of the 173 handicapped children not attending school, 40 are suggested as eligible for routine classroom, 51 for physically handicapped class and 14 for hard-of-hearing, vision conservation and auxiliary classes. It is suggested by those conducting the survey that 68 children in this group, including 53 mental cases, should be placed in institutions.

It is estimated that of the 208 preschool handicapped children known to the board of health in Hamilton, 92 may eventually be able to attend regular classes, but these figures are not presented as reliable.

Table K6 presents an estimate of what might be required for the whole group in the way of special class facilities, if such were available, also certain recommendations of institutional placement.

It would appear from Table K4, that 310 of 575 handicapped children of school age, or 54

per cent, are considered for special class or institutional placement. Of the 310, but 71 (23 per cent) were so placed in special classes when the preliminary information was received. Again it should not be assumed that special school facilities should be provided for the remaining 239 children, a considerable number of whom might be eligible for institutional placement and others of whom might be expected to progress favorably.

It is estimated that in the final analysis, about half (50 out of 103) orthopaedically or physically handicapped children of school age would be eligible for special classes, if such were available. This is in addition to the eight children so placed at present. This would include children with orthopaedic and other conditions such as heart, kidney, etc., who might benefit from temporary or continued placement in special classes where provision for rest, diet, occupational and physiotherapy are available. It is difficult to estimate the number of preschool children who would be accepted in special classes, but Table K6 does suggest that year by year provision should be made for this possibility.

TABLE K6

ESTIMATED EDUCATIONAL NEEDS OF 426 HANDICAPPED HAMILTON CHILDREN

Suggested Special Class or Institution	SCHOOL AGE			Infant and Preschool	TOTAL
	Presently in Special Class as Indicated	In Regular Class Now	Not in School		
<u>Class</u>					
Orthopaedic or physically handicapped	8	52	51	52	163
Hard-of-Hearing	16	25	2	9	52
Vision Conservation	6	6	1	2	15
Auxiliary	41	7	11	10	69
<u>Institution</u>					
Mental		15	53	41	109
Deaf			3		3
Blind			3	1	4
Orthopaedic		1	9	1	11
TOTAL	71	106	133	116	426

CHAPTER VI

STUDY OF HANDICAPPING RECORDS IN ONE ONTARIO TOWNSHIP

In studying the extent of handicapping conditions among Ontario children, the Survey Committee analysed the records available in one south-western Ontario township. This particular township was chosen because it represented a near balance between urban and rural population, including an industrialized town with an assessed population of 6,920 and a surrounding rural population 6,303. The school populations were 1,648 in the town and 902 in the township.

Officers and records of the following agencies were consulted; the county health unit, society for Crippled Children, hospitals, Victorian Order of Nurses, schools, Women's Institutes, Federation of Agriculture, and Home and School Associations. In addition, the cooperation of physicians, optometrists, teachers and others was enlisted.

It was found that the records on the infant, preschool and postschool age groups were most limited. Postschool age records were practically nonexistent. The records of the voluntary agencies consulted were, on the whole, incomplete, or limited to a specific handicap. No names were added to the roll from the records of the medical profession but contact with the physicians did give confirmation of diagnosis in doubtful cases.

The main source of information regarding the school-age child proved to be the attendance, disposition and progress cards used in the schools.

These cards bear the diagnosis of the examining doctor for the school and are standard practice in any school area in the province which is covered by a full-time medical officer of health. The field staff of the Survey Committee examined the cards in all the elementary schools in the area. There were no health services in the high schools and no records available from that source. The child health centres and the medical officer of health for the county health unit provided the information recorded on preschool children. In addition to those included in the figures submitted in Table K7, there were 54 children in the town and 14 in the rural township who had visual deficiencies which had been corrected by glasses or were not of so serious a nature. Oculists and optometrists made their records available to the Survey Committee and commented upon the high rate of visual deficiency in the area.

A careful analysis and screening by a physician, of the individual reports of handicapping conditions in the children of school and preschool age as submitted to the field staff conducting the pilot study, showed that in the town there were 128 children and in the rural township 71, a total of 199 children whose condition would necessitate treatment or training and special placement in employment or institutions.

Table K7 shows the number of handicapped children according to their specific major handicap. In some cases the handicapping was multiple.

TABLE K7
A TOWNSHIP PILOT STUDY OF HANDICAPPING CONDITIONS IN CHILDREN

MAJOR DEFECT CLASSIFICATION	TOWN (School Population 1,648)		RURAL TOWNSHIP (School Population 902)		TOTAL
	SCHOOL AGE	PRESCHOOL AGE	SCHOOL AGE	PRESCHOOL AGE	
CONGENITAL MALFORMATIONS					
Feet, Hands and Shoulders	10	2	8	1	21
Strabismus	9	3	7		19
Hare Lip and Cleft Palate	3	2	1	1	7
Heart	2		2	1	5
Deaf	3				3
Cataracts				1	1
Spina Bifida	1				1
Other	8	1	4		13
BONE, JOINT, MUSCLE					
Postaccident	5		3		8
Cerebral Palsy	5				5
Poliomyelitis	1		1	1	3
Hydrocephalus				2	2
Other	4		1		5
OTHER DEFECTS					
Eye	17		10		27
Mental	13	1	9		23
Speech	7	2	2		11
Hearing	5		5		10
Asthma	7		1		8
Mentally Retarded	5		3		8
Neurological	2		2		4
Rheumatic Fever	1		3		4
Epilepsy	3		1		4
Eczema	1	1			2
Bronchitis	1				1
Nephritis	1				1
Pulmonary Tuberculosis	1				1
Rheumatic Heart	1				1
Other			1		1
TOTAL	116	12	64	7	199

Note: In compiling this table postoperative cases where recovery was complete to the point that the child was not considered handicapped academically, socially or in his employability, were not included, nor were children with corrected vision.

**REPORT OF THE ONTARIO
HEALTH SURVEY COMMITTEE**

SECTION L

REHABILITATION OF ADULTS

(Pages 439 to 450)

L REHABILITATION OF ADULTS

CONTENTS

	Page
Summary	442
Chapter I: Governmental Rehabilitation Facilities	443
Chapter II: Nongovernmental Rehabilitation Facilities	447

REHABILITATION OF ADULTS

SUMMARY

The following chapter deals with the rehabilitation of adults in Ontario. The material is presented in the form of an inventory. It has been found even more difficult to obtain comprehensive records on handicapped adults than on handicapped children.

Attention has been called to the fact that the word "rehabilitation" is being used loosely, and sometimes in a very limited sense. Medical dictionaries have defined its application as, "The restoration to useful activity of individuals who have suffered from physical or other disability".

In reviewing the agencies engaged in this work, it may be seen that the Workmen's Compensation Board, the federal Department of Veterans Affairs, and the Canadian Paraplegic Association have a program which includes hospitalization, medical care, nursing, physical medicine, re-education and placement service. The eligibility of persons for treatment, however, is restricted respectively to those covered by workmen's compensation, veterans and paraplegics.

Other agencies engaged in rehabilitation, whether governmental or voluntary, limit their ser-

vices to one or more divisions of the work, or to one type of disability.

Specifically, the National Employment Service deals with placement of handicapped persons; the Ontario Department of Education provides special courses, both academic and industrial; some voluntary groups have job-training centres such as those conducted by the Red Cross Society, and a few hospitals and sanatoria are equipped and staffed to give occupational therapy and physiotherapy.

The Canadian National Institute for the Blind and the National Society for the Deaf and Hard-of-Hearing restrict their activities, including re-education, job training and placement, to these two groups of handicapped persons.

While it is true that there exists a more or less systematized coordination of effort among the agencies contributing certain specified services, their concentration in three or four cities of the province means that referral often involves transportation of patients from distant points, whereas in many cases the treatment required could be made available in the community.

CHAPTER I

GOVERNMENTAL REHABILITATION FACILITIES

Department of Veterans Affairs

The facilities of the Department of Veterans Affairs are restricted to the use of handicapped veterans (with the exception of civilian paraplegics).

Physiotherapy and occupational therapy services are available in the D. V. A. hospitals, and all necessary appliances are supplied. During the treatment and convalescence, educational courses may be taken under the supervision of an educational officer.

While in hospital, the patient is visited by the casualty rehabilitation officer and by a social service worker who, by discussion with the patient and with knowledge of the patient's social and medical records, is in a position to offer guidance in the type of vocation that could be followed. If further educational or vocational training along a particular line is indicated, the department pays the fee and provides a maintenance allowance for the period of training. The casualty rehabilitation officer maintains employer contacts and follows up each veteran until he is rehabilitated. Suitable employment is available for many handicapped veterans within the Department of Veterans Affairs.

The facilities of the Department of Veterans Affairs in operation in Ontario as of December 31, 1948, were:

Toronto:	Sunnybrook Hospital
	Christie Street Hospital
	Divdale Health & Occupational Centre
	York Health & Occupational Centre
	Lyndhurst Lodge (for paraplegics)
London:	Westminster Hospital
	Western Counties Veterans Lodge (for the rehabilitation of tuberculosis cases).
Ottawa:	Rideau Health and Occupational Centre.

Each of the Department's active treatment hospitals in Ontario has an organized program of physical medicine. The medical staff prescribes remedial physical training where necessary. This retraining is continued in the health and occupational centres, which are largely for convalescents.

Civilian paraplegics are treated in certain D. V. A. hospitals through arrangement with the Canadian Paraplegic Association. At Sunnybrook Hospital there is a 24-bed ward for paraplegics. It is considered essential that this ward be kept in operation for possible veteran readmissions. As the number of veteran patients declines, civilian paraplegics, screened by the Canadian Paraplegic Association, are admitted.

National Employment Service - Special Placements Division

The National Employment Service, established in 1940 under the Unemployment Insurance Act, is administered by the federal government. Local offices are maintained in 68 cities and towns in Ontario. Where necessary, a local office may staff and operate a branch one or two days a week for the convenience of smaller centres in its territory.

The Ontario regional office in Toronto covers the province with the exception of the area from Sault Ste. Marie west; the latter being under the jurisdiction of the Winnipeg regional office. Included in the personnel is a regional director of special placements with an assistant for adults and an assistant for the youth section.

During 1948, the service placed 3,627 handicapped workers in employment in the Ontario region. Of these, 2,303 were male and 1,324 female.

Special placement units for the accommodation of the handicapped worker are established in the Toronto, Hamilton, London and Windsor local offices. In each of these units, a special officer is responsible for the placement of male workers and another for the placement of female workers.

The Toronto local office has a department for youth, staffed by a manager and four placement officers. In this department, one or more officers are assigned to handicapped youth.

Recently a staff member of the special placements division in the Toronto office was given a course of training by the Canadian National Institute for the Blind in order that he might specialize in assisting partially blind persons to secure employment. He serves groups from sight-saving classes, defective vision cases referred from industry, and persons with visual defect but not sufficiently handicapped for registration with the institute.

Workmen's Compensation Board

The Workmen's Compensation Board was established in 1915 under the provisions of the Workmen's Compensation Act (Ontario). Although increases in coverage and benefits have been made, the purpose and basic principles of the act have remained the same since its inception. The act covers an ever increasing number of industries which are classified under two schedules. At the time of this report there were approximately 45,000 employers under Schedule 1, who were contributing to the accident fund. They are collectively liable for treatment and awards. Under Schedule 2, the firms are individually liable, and are assessed only for administration costs.

When a man is injured while at work he receives necessary medical, hospital and nursing care. Where there is a permanent disability, an award is made, based on the individual case and the required appliances are supplied.

The rehabilitation section which was added to the act in 1924 empowered the board to spend up to \$100,000.00 a year on "rehabilitation". Up to the present, not more than \$7,000.00 a year has been used to cover the disbursements of the special rehabilitation department which is closely integrated with the hospitals and convalescent centre. Cases referred to this department are mostly those where there is an indication of permanent disability requiring retraining.

In 1932, physiotherapy was introduced, and in 1938 with the addition of occupational therapy, a physical medicine clinic was established.

Industrial Accidents

The Statistical Report on Industrial Accidents prepared by the Workmen's Compensation Board of Ontario for the year 1949 was the latest material available to the Survey Committee on this subject. It shows an increase in such accidents reported from 59,834 in 1938 to 179,894 in 1949.

The wartime and postwar industrial boom in Ontario has naturally resulted in a large increase in the numbers of industrial accidents, and some measure of this increase is indicated in Table L1 below.

It should be noted, too, that there were, in 1938, a total of 24,144 employers listed under Schedule 1 of the Workmen's Compensation Board, while by 1949 this number had increased to 44,549.

Awards for compensation and medical aid during 1950 amounted to \$16,882,813, including all payments made for claims regardless of the year in which the accident occurred. It is estimated by the Board that a further \$8,979,000 will be required in 1951 to bring outstanding and continuing claims to finality.

(For further information on Workmen's Compensation Board activity, see Chapter II, Section I, of this volume of the Ontario Health Survey Report.)

Analysing the 166,662 total accidents, in 1949, noted in Table L1 shows their geographic distribution across the province by regions used throughout this report. (See Volume I, page 11.)

Region 1.....	26,221
Region 2.....	37,443
Region 3.....	63,508
Region 4.....	5,801
Region 5.....	8,333
Region 6.....	14,777
Region 7.....	10,419
Outside Ontario	160
Total	166,662

Malton Rehabilitation Centre

In 1947 a complete convalescent centre was opened at Malton, Ontario. The buildings at Malton were originally constructed for air training purposes, later taken over by the Department

Table L1

ACCIDENT CLAIMS SETTLED BY THE WORKMEN'S COMPENSATION BOARD OF ONTARIO, 1938 to 1949

Type of Claim	Year						
	1938	1940	1942	1944	1946	1948	1949
Death	276	269	309	286	246	240	283
Perm. Disability	936	1,432	1,950	2,210	2,440	2,199	1,740
Temp. Disability	21,501	27,245	40,985	40,191	43,426	49,390	47,400
Medical Aid Only	29,559	43,346	74,642	66,819	76,411	109,904	117,239
Total	52,272	72,292	117,886	109,506	122,523	161,733	166,662

of Veterans Affairs and converted to a temporary hospital. In 1947, the federal government sold the buildings to the Workmen's Compensation Board.

There are 11 separate buildings situated on the 23.5 acres of land. The hospital and administration building provides 100,000 square feet of floor space. The wards for patient beds are on the ground floor and dormitories for up-patients on the second floor. The two clinic or treatment buildings have a floor space of 57,000 square feet and the remaining buildings, including stores, theatre, 3 residences, fire hall, maintenance and boiler house, 39,000 square feet.

There are 190 employees at the centre. Those specially trained in rehabilitation and physical medicine include:

- 7 doctors with orthopaedic training
- 21 physiotherapists
- 20 occupation therapists
- 5 remedial gymnasts with additional training in anatomy
- 4 rehabilitation officers, (including two women) trained in personnel work.
- 14 registered nurses
- 1 handicraft instructor
- 2 x-ray technicians
- 10 certified nursing assistants
- 10 ward aides
- 10 orderlies

The centre at present is equipped to accommodate 475 patients, including 186 in-bed patients. In March, 1950, there were 436 patients in residence.

The average stay at Malton is 39 days. The period of residence varies from one or two weeks to six months or longer, depending on the nature of the injuries.

It cost \$627,822.00 to operate Malton in 1949. During that period 3,014 patients were admitted and 3,056 discharged. Operating costs are approximately \$5.00 per day per patient.

Each patient at the centre is treated with a view to restoring him to his original usefulness insofar as is possible in order that he may return to his former place of employment. The attitude of those entrusted with the task is that long periods in the hospital mean a long, difficult convalescence, whereas after diagnosis and surgical treatment, the less institutional and more individually competitive atmosphere of Malton tends to arouse the patient to bend every effort toward complete recovery. The adaptation and continuing improvement of the land and buildings constitutes a form of occupational therapy and provides a stimulating interest for those being brought back to a normal condition of physical and mental health.

The Malton Convalescent Centre has attracted many visitors from other provinces and

the United States, where similar centres are being planned. Particular interest has been shown in the ingenious devices and methods invented or developed at Malton for more rapid restoration of injured or weakened muscles.

In addition to Malton, which admits only male patients, the board has a floor in the private pavilion of the Toronto General Hospital and the use of a solarium at Toronto Western Hospital. Outside the Toronto area, cases are taken care of in public or private hospitals in or near the place of home and employment. If specialized treatment, not available in the community, is required, the board may transfer the patient to a hospital where such services are provided, or to the convalescent centre at Malton. In all institutions where workmen's compensation cases are treated, the patient is allowed to have his family physician in attendance.

In the past three years, 487,148 accidents have been reported to the board. From the commencement of the act up to the end of 1947, 2,382,963 accidents have been dealt with and \$234,101,032.88 awarded in benefits. On an average, 675 accidents are reported to the board each day, and approximately 250,000 medical, hospital and nursing accounts are paid annually.

Department of Health Poliomyelitis Program

While poliomyelitis is more prevalent among children than adults, many adults have contracted the disease and have been left handicapped. The provincial poliomyelitis program which is outlined in Section K₁ on Handicapping Conditions in Children, applies equally to adults.

Sanatoria

The nature of the treatment given in sanatoria restricts the rehabilitation program to the less strenuous activities. However, occupational therapy is found to be very beneficial in some cases. Eight sanatoria in the province employ occupational therapists as follows: London 9, Hamilton 5, Brantford 1, Weston 5, Gravenhurst 2, Kitchener 1, Ottawa 1, Kingston 1.

Education

Educational services to the handicapped between the ages of three and 21 years have been provided by the Ontario Department of Education since the Auxiliary Classes Act was passed in 1914. In 1940, habilitation units were introduced for crippled adolescents and adults. This meant that teaching and trade training could be given to the homebound by visiting teachers or teachers located in the area. There are now 17 of these units in operation. Following a similar pattern, in 1942, secondary school units for the crippled were initiated. These provide the homebound with secondary school instruction by qualified teachers for four hours weekly. There are now 32 of these secondary units in operation.

In the sanatoria there are classes for juveniles, adolescents, and adults. Patients may take work at any school level between grades I and VIII, or pursue a commercial or vocational course, or take correspondence courses from secondary school to university level. At the London, Essex and Muskoka sanatoria, among other things watch repairing is taught; at London and Hamilton sanatoria, radio repair; at Gravenhurst there is a class in printing.

SANATORIA CLASSES FOR JUVENILES, ADOLESCENTS AND ADULTS

Muskoka	6	Fort William	1
London	5	Peninsula	1
Freeport	1	Hamilton	12
Ottawa	1	Weston	4
TOTAL		31 classes	

There is provision for extending this type of class to general hospitals.

HOSPITAL CLASSES FOR JUVENILES ONLY

Toronto	7
Fort William	1
Hamilton	1
London	1
Port Arthur	1
Total	11 Classes

Twenty special industrial day classes are conducted in Hamilton and 49 in Toronto. The special industrial schools give both academic and vocational training. These special industrial classes are in schools where there is a wide range of equipment necessary to the teaching of diverse trades and arts.

The facilities of the vocational, technical and commercial schools are available to handicapped adults who are capable and physically able to undertake the training or studies required. There is no restriction barring admission of students over 21 years of age, and since the departmental examinations for entrance to secondary schools have been discontinued, applicants are admitted on their individual qualifications for the desired course. However, if the student has already had six years instruction in a secondary school, the local school board is permitted to charge for tuition.

While no special provision has been made to accommodate handicapped students, a number of them have taken advantage of courses which do not require complete physical mobility. Northern Vocational, Central Technical and Central Commerce in Toronto, and some of the newer schools elsewhere in the province, have ramps or elevators, which means that a greater number of classrooms are accessible to students who use wheel chairs.

It has been noted by educationists that where there is an impediment to independent ambulation, making necessary the assistance of teachers or fellow students, the handicapped pupil is much less likely to complete his course of study.

The universities in the province offer correspondence courses in arts and sciences not requiring laboratory experience. In some instances a certain amount of classroom attendance or practical experience is necessary, but some courses leading to a Bachelor of Arts degree may be obtained entirely by correspondence.

Some universities conduct correspondence courses including such subjects as banking, accounting and insurance. The universities provide the instruction but no certificates, diplomas or degrees are awarded. Each organization is authorized by charter to award its own designation on satisfactory completion of the course.

CHAPTER II

NONGOVERNMENTAL REHABILITATION FACILITIES

Canadian Paraplegic Association

The Canadian Paraplegic Association was formed in 1945 as a veterans' organization. The immediate aim was to assist the paraplegic veteran to achieve the highest possible degree of physical and economic independence. To this end, the association offered suggestions to the Department of Veterans Affairs, and sought changes in treatment and pension regulations. It later became the goal of the association to extend to civilians the benefits of modern methods of physical retraining developed by the medical advisers to the Department of Veterans Affairs.

The head office of the association is in Toronto. Divisional offices are maintained in Toronto, Montreal, Halifax, Winnipeg and Vancouver.

During the war, the Department of Veterans Affairs opened a retraining centre for veteran paraplegics at Lyndhurst Lodge in Toronto, and later an arrangement was made whereby the department agreed to retrain civilian paraplegics. On March 31, 1950, the enrolment at Lyndhurst Lodge having become almost entirely civilian, the department turned the Lodge over to the association. However, the department continues to give hospital treatment to civilian paraplegics referred by the association and veteran paraplegics are admitted for retraining at Lyndhurst.

Lyndhurst Lodge has been adapted to its present use by the introduction of an elevator, ramps, and a one-story addition for male patients. The administration offices, dining room and gymnasium are on the first floor. The second floor is used mainly for female patients; the third floor for clerical offices.

The staff at Lyndhurst includes two physical training instructors, three full-time physiotherapists, and one-half time, eight nurses, one doctor full-time and one half-time, eleven orderlies, and one casualty placement officer.

The Lodge has 39 patient beds, all fitted with overhanging bars. During August, 1950, 35 patients were in residence. As a rule, only persons 16 years of age and over are accepted as resident patients. However, under extenuating circumstances, younger patients have been admitted, but they are more often treated as out-patients. The average stay of all patients in residence is approximately six months. After a patient has completed the program of retraining, it is often difficult and sometimes

impossible to find suitable living quarters for him. This often necessitates his remaining at the Lodge beyond the required period.

The cost to the civilian patient during his stay at Lyndhurst is \$9.75 per day. About one half of the patients at the Lodge are pay patients, including those covered by workmen's compensation. In some cases, the patient pays a portion of the rate, according to his means, as determined by the association. Under an arrangement with the provincial government, the province pays 50 per cent of treatment costs for nonpaying and partial paying patients, and the municipality 50 per cent where the association can persuade the latter to accept a share of the responsibility. At the time of the survey owing to the failure of certain municipalities to contribute, the province was carrying two-thirds of the treatment load.

Since its formation in 1945, the Ontario division of the association has extended its services to about 400 paraplegics including out-patients.

For the year 1949-50, the Ontario division of the association received grants of \$65,000 from the province of Ontario, \$10,000 from the city of Toronto. It should be explained that in the case of both the province and the city, accounts for treatment are submitted by the association and charged against the grant. The provincial grant did not exceed the amount owing to the association but in the case of the city of Toronto there was a credit of over \$5,000.

The association receives a grant of \$10,000 yearly from the Department of Veterans Affairs, and \$15,000 from the Department of Health and Welfare. These federal grants are for administration purposes only, and are apportioned among the five divisions of the association in Canada.

Canadian National Institute for the Blind - Toronto

According to information provided by the Canadian National Institute for the Blind, 80 per cent of the blind lose their sight in adult life. This percentage figure indicates that the major part of the institute's effort is directed toward the rehabilitation of adults. The work done among children is covered in Section K of this report dealing with Handicapping Conditions in Children.

Some idea of the extent of the institute's work for the blind in this province is given by the figures showing income and expenditure in Ontario

for the year ended March 31, 1949:

Sales:	Blind-made products and contract work	\$ 794,490.73
	Industrial cafeterias and stands.....	3,489,855.45
		<u>\$4,284,346.18</u>
Cost of Sales:	Blind-made products and contract work	\$831,153.98
	Industrial cafeterias and stands	3,309,246.54
		<u>\$4,140,400.52</u>
Surplus from above operations....		\$ 143,945.66
Cost of home-teaching library, residences, prevention of blindness, employment, welfare and other special services		\$591,123.10
Cost of services, less profits on above operations.....		\$447,177.44
Cost of services, less profits on above operations.....		\$447,177.44
Income from donations, grants, etc.		<u>398,729.24</u>
Net deficit for the year.....		<u>\$48,448.20</u>

As of November 30, 1949, there were 4,845 blind people over the age of 21 years permanently resident in Ontario, of whom 2,722 were males and 2,123 females. These figures are broken down further as follows:

Age Group	Total	Male	Female
21-39	680	425	255 (M 117, S 138)
40-64	1,706	1,038	668 (M 473, S 195)
65-69	649	342	307 (M 247, S 60)
70 and over	1,810	917	893 (M 734, S 159)
Totals	4,845	2,722	2,123

The institute operates a garment factory, a broom and brush factory, and a blindcraft centre in Toronto. It also maintains resident workshops at Hamilton, St. Catharines and Ottawa, and plans are under way for similar workshops in Windsor and Kitchener.

Some of the blind have been trained for vocations such as piano tuning, operating of dictaphones, elevators, etc. Also, a number of men have been trained as field secretaries to fill positions in the organization. There are 92 of these men on staff across Canada.

Following are figures showing the number of blind persons receiving employment and cash benefits in the year ended March 31, 1949.

370 blind persons received employment in institute factories, operating

institute stands and on the staff,
total income received \$517,463.12

179 blind persons worked in general industry where they were placed by the institute, earnings received amounted to 302,045.80

216 blind persons received part-time supervised occupational service, cash benefits amounted to..... 75,012.07

Cash benefits to over 700 blind as a result of special financial assistance, piano tuning orders, supplying of raw materials at cost and home teaching amounted to approximately..... 30,000.00

Cash relief paid (not including relief in kind)..... 55,338.65

Total cash benefits... \$979,859.64

Funds to support the institute are raised by voluntary subscription in each province. In 1948, \$200,000.00 was contributed in the city of Toronto alone. The Ontario grant through the Department of Education was \$60,000.00 in 1948 and the federal grant was \$18,000.00. The treatment and rehabilitation of the war blinded is financed by the Department of Veterans Affairs.

It is estimated that approximately 12 per cent of the blind, with adequate training, can be gainfully employed and in many cases they are self-supporting. However, to help compensate for their handicap and to assist those who are unemployable, a pension of \$40 per month is provided by the federal and provincial governments jointly. There is a restriction with the pension which limits the income of a single man to \$720 a year (including pension), a married man to \$1,200.00 per year (including pension), and a blind man with a blind wife to \$1,300.00 per year (including pension).

National Society for the Deaf and Hard-of-Hearing

Although a national organization, this society is active for the most part only in Ontario, and as yet mainly in the Toronto area. However, it plans to develop its services as rapidly as possible in other Ontario cities and eventually throughout Canada. Specific services are enumerated in Section K, on Handicapping Conditions in Children. Therefore, only those which have special significance for adults, will be mentioned here.

The society aims to assist individuals who have hearing handicaps, to become economically independent and to secure a happy adjustment in society. This entails competent medical diagnosis, treatment and prognosis and in many cases the provision of hearing aids followed by special education and vocational guidance. An essential service of the society is its aid to the deaf individual in attain-

ing personality adjustment. Counsel is provided to assist in overcoming the psychological handicap of bewilderment and confusion which so often accompanies deafness.

During the year ended March 31, 1948, 64 deaf and 1,159 hard-of-hearing persons registered with the society. Added to previous registrations, this gives cumulative totals of 674 deaf and 3,498 hard-of-hearing. The society extends its services to both civilians and war veterans. By March 31, 1948, there were 1,991 ex-service personnel registered with the society.

In its placement service, the society has established relations with the National Employment Service. During the year ending March 31, 1948, there were 77 deaf and 77 hard-of-hearing persons placed—a total of 154. The society employs a placement officer who contact, among others the graduating pupils at the Ontario School for the Deaf so that he may assist them to obtain employment.

Funds for the work of the society are raised through private donations augmented by provincial and federal government grants. The Ontario grant for the fiscal year ended March 31, 1948, amounted to \$12,000. The federal grant, under the D. V. A., for the same period was \$4,472.13. The society's expenditures of the year amounted to \$19,197.04.

The society estimates the number of adults in Ontario between ages 16 and 65, who require special counsel, treatment, hearing aids and aid in job placement, to be 39,900. It estimates that there are 10,800 people over 65 whose hearing disability necessitates treatment and possibly hearing aids. These figures are based on the 1941 census and no allowance has been made for increase in population.

Society for Crippled Civilians

This society is primarily a service organization for handicapped civilian adults. As such it operates a job-training centre and workshop where an average of 125 persons are employed daily.

Material, such as discarded clothing, damaged or discarded furniture, stoves and other household equipment is collected from thousands of Toronto homes and used for practical training purposes. The repaired or manufactured items are then sold through the society's three retail stores.

In addition to those employed at the workshop, the society has an enrolment of 400 homebound for whom it provides training, sales outlet and contract work, such as stringing tags, assembling toys, typing, etc. The goods are handled on an assignment basis free of charge, the full amount of the sale price being remitted to the workers.

Officials of the society state that they are unable to take care of all the applicants referred to

them by clergymen, church and community groups, and social and government agencies. To do so, would necessitate doubling their present capacity. There is a record of over 200 handicapped from points outside the city of Toronto, having received help and job training. The society feels, however, that in view of the fact that the only assistance given them has come from the Community Chest and a grant to their building fund from the city of Toronto, it is only natural that the city should expect the need for training city applicants be satisfied first.

Since the training centre was established in 1938, the society has assisted over 6,000 handicapped persons, and has paid out almost \$500,000.00 in wages. In 1948, wages paid to handicapped workers totalled \$101,942.27. The average wage paid to 93 handicapped civilians in 1945 was \$615.22; the average wage paid to 125 in 1948 was \$815.58.

The society, as a service organization giving job-training assistance to the homebound in supplying equipment in many cases to those who require it, cannot compete with the high wages paid in regular industry. It does, however, give first consideration to the health of the employees. Meals are served below cost in the cafeteria, and during the 15-minute rest periods morning and afternoon free tea and coffee are served.

The policy of the society is to encourage those who have received training to get employment outside of the workshop, and they are directed to the most likely sources. This works to the financial betterment of the individual and allows the society to extend its job-training services to a greater number of handicapped.

The society's budget for 1950 is \$150,000, but it is expected that operating costs will amount to \$200,000. The Community Chest will provide \$29,000.

Ottawa Neighborhood Services

Recently an attempt has been made to set up a training centre for disabled civilians in Ottawa. Handicapped persons are referred to the centre by other welfare organizations, which must be prepared to furnish case histories and make arrangements for medical, psychological, interest aptitude, and vocational tests required by the centre. This enables the centre to make an appraisal of the applicant's ability before he is placed in training.

There is a growing department at the centre devoted to the homebound. Handicrafts are taught by volunteer workers.

The Amity Rehabilitation Centre of Hamilton

The Amity Association was formed in 1932 for the purposes of distributing used and repaired clothing to the unemployed. Since that time, it has developed a rehabilitation centre for the handicapped.

The association has a three-story brick building which provides 36,000 square feet of floor space for workshops and two salesrooms. In addition the association operates a branch retail store.

The workshop has several departments, where the handicapped are instructed in switchboard operating, radio repair, electrical work, shoe repair, furniture refinishing, upholstering, dress-making, etc. The shops not only repair and re-finish goods for their own salesrooms, but they also accept orders from the public. The centre provides employment for from 40 to 60 handicapped persons. In addition, there is an office and store staff of nine, full time, and 15 truck drivers.

During 1949, the total disbursements of the association amounted to \$72,000 of which \$35,000 was paid in wages to those engaged in the workshops.

The association does not participate in the receipts of the Community Chest, nor has the city given financial assistance. The centre is supported by donations, and receipts from the salesrooms.

Occupational Therapy Centres.

In Section K on Handicapping Conditions in Children, four occupational therapy centres, located in Toronto, Hamilton, Windsor and Brantford, are described.

The centres at Windsor and Brantford are sponsored by the local chapters of the Ontario Division of the Canadian Red Cross Society. The professional staffs give treatments at the local general hospitals.

At the Toronto Centre, about one half of the patients are adults. Including home visits, the number treated per month is approximately 100, and 50 per cent of these patients are private cases.

Cases referred to the centre include patients discharged from sanatoria, Toronto Psychiatric Hospital and Toronto General Hospital, as well as cases referred by the welfare department of the city of Toronto.





Message from the Honourable, the Minister of Health for Ontario,
Mackinnon Phillips, M.D., C.M.

This copy of the Report of the Ontario Health Survey Committee is sent to you with the compliments of the Committee and the Ontario Department of Health. It is a complete report of health conditions as they existed in the Province in 1948.

However, much has transpired since then, and the Government of the Province of Ontario has done much and will continue to do its best to complete implementation of the Report's recommendations.

For example, this Report stated that an additional 10,249 general hospital beds should be the goal for 1954. Well, 6,100 have been completed and an additional 5,600 are either under construction or planned. Further, accommodation for more than 2,800 beds for chronic and convalescent patients has been added or approved. This makes a grand total of 14,500 beds. In addition, nurse recruitment has been aided by provision of government grants for the construction of modern accommodation for more than 2,800 nurses' beds.

In the field of mental health, a plan has been developed whereby general hospitals are encouraged to provide psychiatric units where both out-patient and in-patient treatment can be given. Government grants of \$8,500 per bed are available for this plan, the purpose of which is to treat and cure mental illness at its onset, and also to relieve pressure on accommodation in regular Ontario (Mental) Hospitals.

At the time of writing, 311 of these psychiatric beds had been added or approved while provision had been made for nine detention ward beds.

Accommodation in the regular Ontario (Mental) Hospitals has been, and is being, increased. Six hundred more beds will be available at Brockville this year, while the Ontario Hospital School at Smith's Falls is gradually nearing completion. More than 1,000 beds are now occupied, while accommodation for another 1,000 will become available during the next 18 months. A new hospital is nearing completion at Port Arthur, while construction of a new 1,200-bed hospital will start this year at North Bay.

-more-

Additions to present accommodation is being built or is planned for London, Hamilton, Kingston and Toronto, while a new 250-bed psychiatric hospital is also planned for Toronto.

As for tuberculosis, treatment facilities appear to be adequate, with more than 5,200 beds available. A new 155-bed sanatorium in Sudbury was built in 1952 with the aid of \$450,000 from the Provincial Government.

All persons attending x-ray surveys conducted by the Department of Health are now being x-rayed free of charge. A 30-cent fee formerly was paid on behalf of each patient by the local voluntary agency, but the Government cancelled this charge.

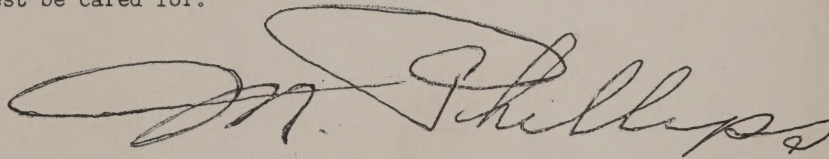
In 1953 the Ontario death rate from tuberculosis was 6.5 per 100,000 population, an all-time low, and the lowest among all Canadian provinces. The death rate has dropped 70 per cent in the past 10 years, and the decline in incidence of new cases in the same period was 13 per cent. During the same time, Ontario's population increased approximately 21 per cent.

A new feature of the fight against spread of tuberculous infection is the hospital admission x-ray program. During 1953 approximately 325,000 patients were x-rayed upon admission to general and public hospitals.

The appropriation of money for the construction of an Ontario Institute of Radiotherapy in Toronto which will, when completed, cost between five and six millions shows determination on the part of the Government to help the fight against cancer.

These are only a few instances of the efforts being made by the Ontario Government, through its Department of Health and its Department of Public Works, to carry out suggestions in the Health Survey Report and its own ideas as to how the health of the people of the Province can best be cared for.

14-5-54

A large, stylized handwritten signature in dark ink, appearing to read "M. Phillips". The signature is written in a cursive style with large, sweeping loops and is positioned in the lower right quadrant of the page.

